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BIBLIOGRAPHY ON
EQUINE ENCEPHALOMYELITIS

(Venezuelan Equine Encephalomyelitis, pp. 68-72)

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PART I. GENERAL EQUINE ENCEPHALOMYELITIS

I. CLINICAL PICTURE: CASE HISTORIES

Cope, J. H.; and Maytum, H.

Equine encephalomyelitis:
Clinical study of small outbreak.
Calif. & Western Med. 53: 82-84,
1940.

Neal, J. B.

Encephalitis: A clinical
study. N. Y., Grune & Stratton
Co., 1942. 563p.

* Mello, Milton Thiago de.

Complications of strangles
clinically simulating equine
encephalomyelitis. Rev. militar
Remonta Vet. 10: 127-147, 1950.

II. PATHOLOGY

Large, A.

Fatal epidemic among horses in
the United States. Veterinarian.
40: 655-660, 727-729, 1867.

III. SEROLOGY

Revo, M. V.; and Shmali, K. V.

Serodiagnosis of infectious
encephalomyelitis in horses.
Veterinaria. 29(5), 18-21,
1951.

Also: J. Amer. Vet. Med. Assoc.
119, 458, 1951. (Abstract)

IV. IMMUNIZATION & PROPHYLAXES. VACCINES

Kelser, R. A.

Equine encephalomyelitis and its
control. Proc. U. S. Livestock
San. Assoc. 45th Annual Meeting.
1941, pp. 22-27.

Woodward, B. T.

Entomologists and in combating
equine encephalitis. Calif. Vet.
3: 1950.

V. THERAPY

Eckell, O. A.; Vagni, O.; Alvarez, E.; and Anaya, J. S.

Treatment of equine infectious encephalomyelitis. *Rev. vet. militar* (Buenos Aires). 1(2): 65-68, 1953.
Vet. Bull. #1657 (1955).

* Starrak, E. S.

Treatment of equine encephalomyelitis. *Can. J. Comp. Med. Vet. Sci.* 18: 274, 1954.
Vet. Bull. #96 (1955).

VI. MAMMALS & AVIAN HOSTS & EXPERIMENTAL STUDIES

Brandly, G. A.

Birds as possible reservoirs of equine encephalomyelitis infection. *North American Veterinarian.* 21: 95-96, 1940.

Cockburn, E., and Cockburn, T. A.

Birds and a virus. *Nature Mag.* 45: 258-260, 1952.

Foster, A. O., and Shahan, M. S.

Unsuccessful attempts to transmit encephalomyelitis from horses to guinea pigs by endoparasites. *Proc. Helminthol. Soc., Wash., D. C.* 9: 20-31, 1942.

Lambert, W. V.; Spellman, S. R.; and Osborn, E.

Differences in incidence of encephalomyelitis in horses. *J. Heredity.* 30: 349-352, 1939.

Zotov, A. P.

Infectious encephalomyelitis in horses. *Veterinariia.* 28: 20-29, 1951.

VII. ARTHROPOD VECTORS & EXPERIMENTAL STUDIES

Bates, M.

Natural history of mosquitoes. *N. Y. Macmillan & Co.* 1949. pp. 374.

Bishop, F. C., and Smith, G.

Resume of mosquito work throughout the world in 1935 equine encephalomyelitis and herpes-encephalomyelitis. *Proc. New Jersey Mosquito Exterm. Assoc.* 21st Annual Meeting. p. 46-47, 1934.

Brookman, B.

Attempts at insectary rearing of *Culex tarsalis*. *Proc. Calif. Mosquito Control Assoc.* 16th Annual Conference. p. 79, 1948.

* Chamberlain, Roy W.; Sikes, R. K. Nelson, D. B. and Sudia, W. D.

Studies on the North American arthrop-borne encephalitides. VI. Quantitative determinations of virus-vector relations. *Amer. J. Hyg.* 60(3): 278-291, 1954.

VII. ARTHROPOD VECTORS & EXPERIMENTAL STUDIES

George William Hooper Foundation.

A final summary of flight range studies on Culex tarsalis and notes on wild bird malaria in Kern County. Proc. Calif. Mosquito Control Assoc. 16th Annual Conference. p. 58-59, 1948.

Gjullin, G. M.; Yates, W. W.; and Stage, H. H.

Studies on Aedes vexans (Meig) and Aedes sticticus (Meig), flood-water mosquitoes in the Lower Columbia River Valley. Ann. Entomol. Soc. Amer. 43: 262-275, 1950.

Hammon, W. M.

Advances in knowledge of the vectors and arthropod reservoirs of certain of the encephalitides. Proc. Calif. Mosquito Control Assoc. 16th Annual Conference. p. 4-6, 1948.

Hammon, W. M.

Encefalitis per virus transmitidas por arthropodod. Medicina (Mexico). 30: 240-243, 1950.

Matheson, R.

Important mosquito-borne diseases that are likely to affect the Middle Atlantic and North-eastern States. equine encephalomyelitis. Proc. New Jersey Mosquito Extern. Assoc. 26th Annual Meeting. p. 1-4, 1942.

Peters, R. F.; Thurman, D. C.;

Markos, B. G.; and Mulhern, T. D.

The unfolding program of vector control in California with reference to studies of mosquito biology. J. Nat. Malar. Soc. 9: 173-175, 1950.

Reeves, W. C.; Brockman, B.; and Hammon, W. M.

Studies on the flight range of certain Culex mosquitoes, using a fluorescent-dye marker, with notes on Culiseta and Anopheles. Mosquito News. 8: 61-69, 1948.

Riley, W. A.

The role of insects and allied forms in the transmission of diseases due to filterable viruses. Minnesota Med. 21: 817-821, 1938.

Thurman, D. C., Jr.; and

Mortenson, E. W.

Studies of the biology of Aedes mosquitoes in irrigated pastures in California during 1949. Proc. Calif. Mosquito Control Assoc. 18th Annual Conference. p. 66-69, 1950.

Tollock, G. S.

Mosquitoes and equine encephalitis. Bull. Brooklyn Entomol. Soc. 36: 35-38, 1941.

VIII. EPIDEMIOLOGY

GENERAL EPIDEMIOLOGY

- * Howitt, B. F.
Certain properties of virus of equine encephalomyelitis. J. Infectious Diseases. 55: 138-149, 1934.
- * Kelser, R. A.
Relation of diseases in lower animals to human welfare: equine encephalomyelitis. Ann. N. Y. Acad. Sci. 48: 385-392, 1947.
- Meyer, K. F.
Equine encephalomyelitis in 1933. In Animal Pathol. Exchange, Univ. Illinois Agric. Extension Service, Urbana. 4p. 1934.
- Records, E., et al.
Report of committee on miscellaneous transmissible diseases. Encephalomyelitis of equines. J. Amer. Vet. Med. Assoc. 80: 509-511; 82: 388-389, 1932.

EPIDEMIC COUNTRIES

- Eklund, C. M., and Blumstein, A.
Minnesota's experience with human encephalitis caused by equine type of virus in 1930. Minnesota Med. 25: 103-127, 1942.
- * Winn, J. F., and Scatterday, J. E.
Equine encephalomyelitis in Florida. J. Amer. Vet. Med. Assoc. 125(929): 115-116, 1954.
- Schoening, H. W., Giltner, L. T., and Shahan, M. S.
Infectious equine encephalomyelitis in 1939. Proc. U. S. Livestock San. Assoc. 43rd Annual Meeting. p. 145-150, 1939.

MISCELLANEOUS COUNTRIES

- Carberier, J., and Cunha, R.
Estudos sobre a encefalomyelite infecciosa dos equinos no Brasil. Arquiv. inst. biol. (Sao Paulo). 14: 12, 1943.
- Floch, H.
Encephalitic and encephalomyelitic infections in French Guiana. Rev. pathol. comparee et hyg. gen. 53(653): 1638-1643, 1953.
- Correa, Esteves Alves (Filho)
Outbreak of equine encephalitis at Camp Grande, Mato Grosso. Rev. Militar Remonta, Ven. 13: 1-12, 1953.
- Excerpta Med. #6343 (1953).

VIII. EPIDEMIOLOGY

MISCELLANEOUS COUNTRIES

Hale, J. H.: and Lee, L. H.

Serological investigation of six encephalitis viruses isolated in Malaya. Brit. J. Exptl. Pathol. 35(5): 426-433, 1954.

Martinez Fontes, L. F.

Encefalomiелitis equine (locura de los caballos). Rev. vet. fermento equine, Argentina. 10(38): 39-43, 1950.

Preston-Smith, H.; and Fernandez, Contreras, L.

La encefalomiелitis equina. Peru. Inst. nac. biol. anim. rev. 4(6/7): 3-9, 1953.

Schultze, E.

La encefalomiелitis equina. Rev. fac. med. vet. Univ. nac. (Bogota). 19: 235-244, 1950.

PART II. EASTERN EQUINE ENCEPHALOMYELITIS

I. GENERAL

* American Health Association.

Control of communicable diseases in man. 7th ed. N. Y., 1950. (Equine encephalomyelitis, p. 45-47.)

Beadle, L. D.

Eastern equine encephalitis in the United States. Mosquito News 12(2): 102-107, 1952. Biol. Abstr. #35430 (1952).

Brueckner, A. L. Poelma, L. J., Everson, C. L., and Reed, R. C.

Equine encephalomyelitis. Maryland Agric. Exptl. Sta. Bull. #369: 137-146, 1934.

* Hadd, G. H.

Eastern equine encephalomyelitis in the 1850's. J. Amer. Vet. Med. Assoc. 99: 390, 1941.

Eklund, C. M.

Encephalitis. Minnesota Med. 24: 723-725, 1941.

Eklund, C. M.

Human encephalitis due to virus of equine encephalomyelitis. Vet. Med. 37: 70-76, 1942.

* Eklund, C. M.; and Blumstein, A.

Equine encephalomyelitis in man. Brit. Med. J. 1: 877, 1939.

* Engel, L. L. and Randall, R.

Some relations between equine encephalomyelitis virus (eastern type) and normal host cellular constituents. J. Immunol. 55: 331-336, 1947. Fed. Proc. 6: 426-427, 1947. (Abstract)

Equine encephalomyelitis. Intern. Med. Dig. 39: 314-317, 1941.

Equine encephalomyelitis and human encephalitis: three neurotropic viruses now known to affect both humans and animals. North American Veterinarian. 22: 665-667, 1941.

PART II. EASTERN EQUINE ENCEPHALOMYELITIS

I. GENERAL

- * Finley, Knox H.
Virus encephalomyelitides.
Med. Clin. N. Amer. 37: 373-394, 1953.
- Fothergill, Le Roy D.
Virus encephalomyelitis in man.
Trans. Amer. Neurol. Assoc. 65: 9, 1939.
- * Giltner, L. T., and Shahan, M. S.
Equine encephalomyelitis. Yearbook of Agric., Washington, D. C., U. S. Govt. Printing Office, 1942. pp. 375-391.
- * Giltner, L. T., and Shahan, M. S.
Horse disease, known as encephalomyelitis, yielding to research. Yearbook of Agric., Washington, D. C., U. S. Govt. Printing Office, 1935. pp. 233-236.
- Giltner, L. T., Shahan, M. S., and Osteen, O. L.
Observations relating to infectious equine encephalomyelitis. Proc. 6th Pacific Sci. Congr. 5: 215-220, 1942.
- Godelfer, Lucille.
Equine encephalomyelitis. Amer. J. Med. Technol. 15: 117-126, 1949.
- Gurman Lopen, R.
Symposium de encetalomyelitis equina: historial. Rev. med. domin. 4: 144-148, 1949.
- * Haymaker, Webb, and Smadel, Joseph.
The viral encephalitides. Washington, Registry Press, 1943.
- Kelser, R. A.
Equine encephalomyelitis. Vet. Bull., Suppl. Army Med. Bull. 34(1): 1-6, 1940. (A review).
- * Also. Ann. N. Y. Acad. Sci. 48: 385, 1947.
Biol. Abstr. #2594 (1941).
- * Kissling, R. E., and Rubin, H.
Eastern Equine encephalomyelitis. CDC Bull. 9: 2-5, 1950.
- * Matheson Commission. 3rd Rept. Epidemic encephalitis. N. Y., Columbia, 1939 (Bibl. of some length on all types).
- * Meyer, K. F.
Summary of recent studies on equine encephalomyelitis. Ann. Internal Med. 6: 645-654, 1932.
- * Mohler, J. R.
Brief history of infectious encephalomyelitis and related affection in United States. J. Amer. Vet. Med. Assoc. 98: 451-453, 1941.
- * Price, E. R.
Encephalitis as a public health problem. J. Amer. Vet. Med. Assoc. 116: 182-186, 1950.
- Randall, R.
Equine encephalomyelitis. Military Surgeon. 91: 659-670, 1942.
Also. Vet. Bull., U. S. Army. 36: 157-171, 1942.

PART II. EASTERN EQUINE ENCEPHALOMYELITIS

I. GENERAL

- * Randall, R.
Equine encephalomyelitis of virus type. Military Surgeon. 96: 233-237, 1945.
- * Randall, R.; and Eichhorn, E. A.
Westward spread of Eastern type equine encephalomyelitis virus. Science. 93: 595, 1941.
- * Rivers, T. M.
Viral and rickettsial infections of man. Philadelphia, Pa., J. B. Lippincott Co., 1948. 587p.
- * Sabin, Albert B.
Insectborne virus diseases of military importance. Military Med. 116(4): 245-251, 1955.
- * Schoening, H. W.
Equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 95: 268-271, 1939.
- * Schlotthauer, C. F.
Equine encephalomyelitis. Military Surgeon. 84: 252-254, 1939.
- * Smith, K. M.
The virus: life's enemy. N. Y., Cambridge Univ. Press, 1940. 176p.
- * U. S. Dept. Agric.
Special report on the horse. (Infectious eastern equine encephalomyelitis, brain fever, sleeping sickness, p. 211-230, 1942.
- * Van Rooyen, G. E.; and Rhodes, A. J.
Virus diseases of man. N. Y., T. Nelson & Sons, 1948. 1202p.

II. DIAGNOSIS, DETECTION, & IDENTIFICATION

- Alice, F. J.
Equine encephalomyelitis in Bahia study of three isolated strains. Rev. brasil bio. 11: 125-244, 1951.
Biol. Abstr. #4121 (1952).
- Carneiro, V.
Immunological relationships between the Brazilian and American virus of equine encephalomyelitis through cross-neutralization tests. Arquiv. inst. biol. (Sao Paulo). 15: 204-238, 1944.
- * Casals, J.
Diagnosis of epidemic encephalitis by complement-fixation tests. Amer J. Public Health. 31: 1281-1284, 1941.
- * Casals, J.
Technique and practical applications of complement-fixation test for diagnosis of infection with encephalitis viruses. J. Bact. 50: 1-5, 1945.

II. DIAGNOSIS, DETECTION, & IDENTIFICATION

- * Casals, J.; and Palacios, R.
The complement-fixation test in the diagnosis of virus infections of the central nervous system. *J. Exptl. Med.* 74: 409-426, 1941.
- * Cox, H. R.
Tissue cultures as more sensitive method than animal inoculation for detecting equine encephalomyelitis virus. *Proc. Soc. Exptl. Biol. Med.* 33: 607-609, 1936.
- * Cox, H. R.; and Fite, G. L.
Serological distinctions between the viruses of encephalitis in St. Louis, 1933, equine encephalomyelitis and vesicular stomatitis. *Proc. Soc. Exptl. Biol. Med.* 31: 499-500, 1934.
- * DeBoer, C. J.; and Cox, H. R.
Specific complement-fixing diagnostic antigens for neurotropic viral diseases. *J. Immunol.* 55: 193-204, 1947.
- * DeBoer, C. J.; Van der Scheer, James; Richmond, Gilbert; Hazz, Edna; and Cox, H. R.
Electrophoretic studies on hyperimmune rabbit sera for neurotropic viruses. *J. Immunol.* 69: 605-610, 1952.
- * Encephalitis and chelonangitis.
Proc. Intern. Congr. Microbiol. 3rd Rept. p. 300-311, 1940.
- * Fothergill, LeRoy D.; Holden, M. and Wyckoff, R. W. G.
Isolation from human beings of equine encephalomyelitis virus. *J. Amer. Med. Assoc.* 111: 1768, 1938.
- * Hammon, W.M.; Reeves, W. C.; and Sather, Gladys.
California encephalitis virus, a newly described agent. II. Isolations and attempts to identify and characterize the agent. *J. Immunol.* 69: 493-510, 1952.
- * Holden, P.; Miller, Betty J.; and Jobbins, D. M.
Isolation of eastern encephalomyelitis virus from mosquitoes (*Culiseta melanura*) collected in New Jersey, 1953. *Proc. Soc. Exptl. Biol. Med.* 87: 457-459, 1954.
Brit. Abstr. 2(6-7): 1221, 1955.
- * Howitt, B. F.
Complement-fixation test with human sera against viruses of St. Louis encephalitis and equine encephalomyelitis. *J. Immunol.* 47: 293-302, 1943.
- * Howitt, B. F.; Dodge, H. R.; Bishop, L. K.; and Gorrie, R. H.
Recovery of virus of eastern equine encephalomyelitis from mosquitoes (*Mansonia perturbans*) collected in Georgia. *Science.* 110: 141-142, 1949.
- * Irons, J. V.; Bohls, S. W.; and Albert, Dorothy.
Comparison of mouse and egg tests with titrations of equine encephalomyelitis virus. *J. Bact.* 45: 79, 1943.
- Jakmauh, P. J. and Feemster, R. F.
Laboratory diagnosis of encephalitis due to equine virus. *New England J. Med.* 221: 653-655, 1939.

II. DIAGNOSIS, DETECTION, & IDENTIFICATION

- * Kissling, R. E.; Rubin, H.; Chamberlain, R. W.; and Eidson, M. E.
Recovery of virus of eastern equine encephalomyelitis from blood of a purple grackle. Proc. Soc. Exptl. Biol. Med. 77: 398-399, 1951.
- * Livesay, H. R.
Isolation of eastern equine encephalomyelitis virus from naturally infected monkey. (Macacus philippinensis). J. Infectious Diseases. 84: 306-309, 1949.
- * Nantel, A.
Influence of thawing on the titre of equine encephalomyelitis virus (eastern type). Ann. inst. Pasteur. 80: 203-206, 1951.
- * Schofield, F. S.
The isolation and identification of the virus of equine encephalomyelitis. Can. J. Public Health. 31: 31-32, 1940.
- Shanan, M. S., and Giltner, L. T.
Equine encephalomyelitis studies. I. Cross-immunity tests between eastern and western types of virus. J. Amer. Vet. Med. Assoc. 80: 764-772, 1935.
- * Sharp, D. G.; Taylor, A. R.; Beard, S.; Beard, J. W.; and Finkelstein, H.
Properties of the isolated equine encephalomyelitis virus (Eastern strain). Science. 92: 359-361, 1940.
- * Taylor, A. R.; Sharp, S. G.; Beard, D.; and Beard, J. W.
Isolation and properties of equine encephalomyelitis virus (eastern strain). J. Infectious Diseases. 72: 31-41, 1943.
- * Taylor, C. E.
Interference between influenza and equine encephalomyelitis viruses in tissue culture. J. Immunol. 71: 125-133, 1953. Biol. Abstr. #14244 (1954).
- * TexBroeck, C.; and Merrill, M. H.
A serological difference between eastern and western equine encephalomyelitis viruses. Proc. Soc. Exptl. Biol. Med. 31: 217-220, 1933.
- * Webster, L. T.; and Wright, F. H.
Discovery of eastern encephalomyelitis virus from brain tissue of human cases of encephalitis in Massachusetts. Science. 88: 305-306, 1938.

III. ETIOLOGY & CULTURE

- * Bang, F. B.
Course of experimental infection of chick embryo with virus of equine encephalomyelitis. J. Exptl. Med. 77: 337-344, 1943.
- * Bang, F. B., and Gay, G. O.
Comparative susceptibility of cultured cell strains to the virus of eastern equine encephalomyelitis. Bull. Johns Hopkins Hosp. 47: 41-44, 1951.
- * Bang, F. B., and Gay, G. O.
The effect of the virus of equine encephalomyelitis on cultured cell strains. Bull. Johns Hopkins Hosp. 52: 278-281, 1951.
- * Bang, Frederick B., and Gay, George O.
Selective destructive effect of eastern equine encephalomyelitis virus on rat and human fibroblast cell lines. Federation Proc. 10: 100-101, 1951.

III. ETIOLOGY & CULTURE

- * Bauer, J. H.; Cox, H. R.; and Olitsky, P. K.
Ultrafiltration of virus of equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 33: 378-382, 1935.
- Carneiro, V.
Behavior of the virus of encephalomyelitis infection of horses, inoculated on chorio-allantoic membrane of duck embryo. Arquiv. inst. biol. (Sao Paulo). 15: 331-338, 1944.
- * Covell, W. P.
Intranuclear inclusions in brain of chick embryo after inoculation of egg with virus of equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 32: 51-53, 1934.
- * Crawley, J. F.
Statistical analysis of factors affecting susceptibility of chick embryos to eastern equine encephalomyelitis virus. J. Immunol. 59: 83-94, 1948.
- Dingle, J. H.
The encephalitudes of virus etiology. New England J. Med. 225: 1014-1022, 1941.
- * Fothergill, LeRoy D.
Human encephalitis caused by the virus of equine encephalomyelitis. Rept. Proc. Third Intern. Congr. Microbiol. p. 361-362, 1940.
- Fothergill, LeRoy D. Dingle, J., Farber, S., and Connerly, M. L.
Human encephalitis caused by the eastern variety of equine encephalomyelitis. New England J. Med. 219: 411, 1938.
- * Higbie, E.; and Howitt, B.
Behavior of virus of equine encephalomyelitis in chorio-allantoic membrane of developing chick. J. Bact. 29: 399-406, 1935.
- * Howitt, B. F.
Moscow 2 strain as compared with other strains of equine encephalitic viruses. J. Infectious Diseases. 63: 269-286, 1938.
- * Kempf, J. E.; Pierce, M. E.; Wilson, M. G. and Soule, M.
Effect of chlorination on virus of eastern equine encephalomyelitis in presence of organic substances. J. Infectious Diseases. 76: 120-125, 1945.
- * Kempf, J. E. and Soule, M. H.
The effect of phagocytes on eastern equine encephalomyelitis virus. J. Bact. 39: 42-43, 1940.
- * Lazarus, A. S. and Howitt, B. F.
Ultrafiltration of virus of equine encephalomyelitis. (Russian Strain, Moscow #2). Proc. Soc. Exptl. Biol. Med. 38: 595-596, 1932.
Ver. Bull. 8: 154, 1938.
- Lianette, E. H. and Koprowski, H.
Interference between viruses in tissue culture. J. Exptl. Med. 82: 195-219, 1946.

III. ETIOLOGY & CULTURE

- * Sanders, Murray; Kabara, Jon J.; Soret, Manuel G.; and Akin, Benjamin A.
Some effects of certain resorcinol derivatives on Eastern encephalomyelitis virus. Factors influencing in vitro screening technic. Proc. Soc. Exptl. Biol. Med. 82(3): 369-373. 1953.
- * Scherer, W. F.; Syverton, J. T.
The viral range in vitro of a malignant human epithelial cell (strain He La Gey). II. Studies with encephalitis viruses on the Eastern, Western, West Nile, St. Louis and Japanese B. types. Amer. J. Pathol. 30(6): 1075-1083. 1954.
- * Soret, M.G.; and Sanders, M.
In vitro method for cultivating Eastern equine encephalomyelitis virus in teleost embryos. Proc. Soc. Exptl. Biol. Med. 87(3): 526-529. 1954.
Vet. Bull. #1658 (1955).
- * Sulkin, S. E.; and Zarafonitis, G.
Influence of anesthesia on experimental neurotropic virus infections. In vitro studies with the viruses of western and eastern encephalomyelitis, St. Louis encephalitis, poliomyelitis and rabies. J. Exptl. Med. 85: 559-569. 1947.
- * Sulkin, S. E.; Zarafonitis, G.; and Goth, A.
Influence of anesthesia on experimental neurotropic virus infections. I. In vitro studies with the viruses of western and eastern equine encephalomyelitis, St. Louis encephalitis, poliomyelitis and rabies. J. Exptl. Med. 84: 277-292. 1946.
- * Taylor, A. R.; Sharp, D. G.; Beard, D.; and Beard, J. W.
Electron micrography of eastern strain equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 51: 332-334. 1942.
- * Taylor, A. R.; Sharp, D. G.; Finkelstein, H.; and Beard, J. W.
Macromolecular components of chick embryo tissue diseased with virus of equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 42: 462-464. 1939.
- * Vilches, A. and Hirst, G. K.
Interference between neurotropic and other unrelated viruses. J. Immunol. 57: 125-140. 1947.
- * Wyckoff, R. W. G.
Ultracentrifugal concentration of homogenous heavy components from tissues diseased with equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 36: 771-773. 1937.

IV. HUMAN PATHOLOGY

- * Adams, R. D. and Weinstein, L.
Clinical and pathological aspects of encephalitis. New England J. Med. 239: 865-876. 1948.
- * Ayres, J. C., and Feemster, R. F.
The sequelae of eastern equine encephalomyelitis. New England J. Med. 240: 961-962. 1949.

IV. HUMAN PATHOLOGY

- Dent, J. H.
Pathological changes in the brains of children infected with the virus of eastern equine encephalomyelitis. Bull. Tulane Med. Fac. 14(2): 85-98, 1955.
- * Farber, S.; and Branch, C.
Pathologic observations on equine encephalitis in man. Arch. Pathol. 27: 647-649, 1939.
- * Hirst, E. W.
Histology of equine encephalomyelitis. J. Exptl. Med. 59: 529-542, 1934.
- * Kissling, R. E.; and Rubin, Harry.
Pathology of eastern equine encephalomyelitis. Amer. J. Vet. Research. 12(43): 100-105, 1951.
- * Levaditi, C.; and Henry-Eveno, J.
Antagonism between the eastern encephalomyelitis virus and that of Bornholm's disease. Compt. rend. soc. biol. 146: 892-894, 1952.
- * Wesselhoeft, C.; Smith, E. C.; and Branch, C. F.
Human encephalitis: eight fatal cases with four due to the virus of equine encephalomyelitis. J. Amer. Med. Assoc. 111: 1735-1741, 1938.

V. VIABILITY

- * Bang, F. B.; and Herriott, R. M.
Purification of equine encephalomyelitis virus by ultracentrifugation and maintenance of its activity with cysteine. Proc. Soc. Exptl. Biol. Med. 52: 177-180, 1943.
- * Chamberlain, R. W. and Sikes, R. K.
Effects of storage on Eastern equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 85(4): 667-670, 1954.
Bull. Hyg. 30: 62, 1955.
- * Finkelstein, H. Marx, W. and Beard, D. and Beard, J. W.
pH stability of virus of equine encephalomyelitis (eastern type) under various conditions. J. Infectious Diseases. 66: 117-126, 1940.
- * Finkelstein, H.; Marx, W.; Bridgers, W. H. and Beard, J.
Rate of inactivation of equine encephalomyelitis virus (eastern strain) relative to H ion concentration. Proc. Soc. Exptl. Biol. Med. 39: 103-105, 1938.
- * Labzoffsky, N. A.
Effect of reducing agents on viability of equine encephalomyelitis (eastern type). Can. J. Res. (E). 24: 119-133, 1946.
- * Pennimpele, F. C. and Parodi, A. S.
Survival of viruses in cadavers of infected rats: eastern type equine encephalomyelitis virus and influenza virus A. Rev. inst. bacteriol. Malbran. 13: 388-393, 1945-1948.

V. VIABILITY

- * Taylor, A. R.; Sharp, D. G.; and Beard, J. W.

Influence of pH on molecular stability of equine encephalomyelitis virus protein (eastern strain). J. Infectious Diseases. 67: 59-66, 1940.

VI. SEROLOGY

- * Beaudette, F. R.

Neutralization tests with the sera of pheasants surviving an outbreak of equine encephalomyelitis. Rept. Proc. Third Intern. Congr. Microbiol. p. 303-304, 1940.

- * Brown, G. C.

Embryonic chick antigens for complement fixation with viruses of eastern and western encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 56: 91-93, 1944.

- * Casals, J.

Heated avirulent antigens for complement fixation tests with certain encephalitis viruses. Science. 102: 618-619, 1945.

- * Casals, J. and Palacios, R.

Complement-fixation in encephalitis and rabies virus infections. Science. 93: 162, 1941.

- * Eklund, C. M., Bell, J. Frederick, and Brennan, J. M.

Antibody survey following an outbreak of human and equine disease in the Dominican Republic caused by the eastern strain of equine encephalomyelitis virus. Amer. J. Trop. Med. Hyg. 31(3): 312-328, 1951.

- * Espana, C.; and Hammon, W. M.

Improved benzene extracted complement fixing antigen for certain neurotropic viruses. Proc. Soc. Exptl. Biol. Med. 66: 101-102, 1947.

- * Havens, W. P.; Watson, D. W.; Green, R. H.; Lavin, G. I.; and Smadel, J. E.

Complement fixation with the neurotropic viruses. J. Exptl. Med. 77: 139-153, 1943.

- * Howitt, Beatrice F.

Complement fixation reaction in experimental equine encephalomyelitis, lymphocytic choriomeningitis, and the St. Louis type of encephalitis. J. Immunol. 33: 235-250, 1937. Vet. Bull. 8: 572, 1938.

- * Lennette, E. H. and Koprowski, H.

Neutralization tests with certain neurotropic viruses, a comparison of the extraneural and intracerebral routes of inoculation for the detection of antibodies. J. Immunol. 49: 375-385, 1944.

- * Mohler, W. M.

Complement fixation with chick embryo antigen in equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 94: 39-43, 1939.

VI. SEROLOGY

- * Morgan, I. M.; Schlesinger, R. W.; and Olitsky, P. K.
Induced resistance of central nervous system to experimental infection with equine encephalomyelitis virus; neutralizing antibody in central nervous system in relation to cerebral resistance. J. Exptl. Med. 76: 357-369, 1942.
- * Morgan, I. M.; Schlesinger, R. W.; and Olitsky, P. K.
Neutralization antibodies in the cerebrospinal fluid in relation to cerebral resistance to equine encephalomyelitis virus. J. Bact. 43: 83-84, 1942.
- * Pierce, M. E.; Kempf, J. E.; and Soule, M. H.
Effect of dilution of neutral mixtures of eastern encephalomyelitis virus and antiserum. Proc. Soc. Exptl. Biol. Med. 48: 604-607, 1941.
- Records, E.; and Vawter, L. R.
Equine encephalomyelitis antiserum. J. Amer. Vet. Med. Assoc. 82: 608-616, 1933.
- Rice, C. E.
Studies on the complement-fixation reaction in virus systems; equine encephalomyelitis virus antigens and antisera. Cornell Vet. 37: 341-348, 1947.
- * Wright, F. H.
Antibodies in human serum which neutralize viruses of equine encephalomyelitis; experience with intraperitoneal mouse protection test. Amer. J. Hyg. 36: 57-67, 1942.

VII. IMMUNIZATION & PROPHYLAXIS: VACCINES

- * Beard, D. W.; Finkelstein, H.; and Beard, J. W.
Repeated vaccination of man against virus of equine encephalomyelitis. J. Immunol. 40: 447-507, 1941.
- * Beard, J. W.; Beard, D. and Finkelstein, H.
Human vaccination against equine encephalomyelitis in (eastern and western strains). J. Immunol. 38: 117-136, 1940.
- * Beard, J. W.; Beard, D.; and Finkelstein, H.
Human vaccination against equine encephalomyelitis virus with formalized chick embryo vaccine. Science, 90: 215-216, 1939.
- * Beard, J. W.; Beard, D., and Finkelstein, H.
Vaccination of man against virus of equine encephalomyelitis (eastern and western strains). J. Immunol. 38: 117-136, 1940.
- * Beard, J. W.; Finkelstein, H.; Sealy, W. C., and Wyckoff, R. W.
Immunization against equine encephalomyelitis with chick embryo vaccines. Science. 87: 490, 1938.

VII. IMMUNIZATION & PROPHYLAXES: VACCINES

- * Beard, J. W.; Finkelstein, H.; Sealy, W. C.; and Wyckoff, R. W. G.
Ultracentrifugal concentration of immunizing principle from tissues diseased with equine encephalomyelitis. *Science*. 87: 89-90, 1938.
- Carneiro, V.
Conservacao do valor antigenico das vacinas de encefalomyelite infecciosa do cavalo. *Arquiv. inst. biol. (Sao Paulo)*. 16: 343-352, 1945.
- Carneiro, V.
Duracao da imunidade na encefalomyelite infecciosa do cavalo. *Arquiv. inst. biol. (Sao Paulo)*. 16: 353-360, 1945.
- * Cox, H. R.; and Olitsky, P. K.
The action of formalized virus as a preventive of experimental equine encephalomyelitis in guinea pigs. *J. Bact.* 31: 38, 1936.
- * Cox, H. R.; and Olitsky, P. K.
Active immunization of guinea pigs with virus of equine encephalomyelitis: effect of immune serum on antigenicity of active and inactive virus. *J. Exptl. Med.* 64: 225-232, 1936.
- * Cox, H. R.; and Olitsky, P. K.
Active immunization of guinea pigs with virus of equine encephalomyelitis immunization with formalized virus. *J. Exptl. Med.* 63: 745-765, 1936.
- * Cox, H. R.; and Olitsky, P. K.
Prevention of experimental equine encephalomyelitis in guinea pigs by means of virus absorbed on aluminum hydroxide. *Science*. 79: 459, 1934.
- * Cox, H. R.; and Olitsky, P. K.
Active immunization of guinea pigs with virus of equine encephalomyelitis; quantitative studies of serum antiviral bodies in animals immunized with active and inactive virus. *J. Exptl. Med.* 64: 217-222, 1936.
- * Crawley, J. F.
Neutralization tests with eastern equine encephalomyelitis virus in chick embryo; statistical treatment of results by probit method. *J. Immunol.* 59: 319-330, 1948.
- Cunha, Raymundo.
Equine encephalomyelitis. Cross-immunity to the western type of virus, the eastern type and a virus isolated in Bahia. *Bol. ministerio agric. (Brazil)*. 30: 1-7, 1941.
- * Engel, Lewis L.; and Randall, Raymond.
Quantitative estimation of egg and chicken proteins in equine encephalomyelitis vaccines. *J. Immunol.* 55: 325-329, 1947.
- * Equine encephalomyelitis in man due to vaccination. *J. Amer. Vet. Med. Assoc.* 125(933): 481, 1954.

VII. IMMUNIZATION & PROPHYLAXES: VACCINES

- * Friedemann, U.; Hollander, A.; and Bornstein, S.
Studies on virus immunity: experiments with viruses of rabies and equine encephalomyelitis. *J. Immunol.* 48: 247-257, 1944.

Gold, H.; and Hampil, B.
Results of skin tests following immunization against encephalomyelitis (eastern and western types) with hivalent vaccines of chick embryo origin. *J. Allergy.* 12: 138-142, 1941.
- * Howitt, B. F.
Immunization of guinea-pigs to virus of equine encephalomyelitis. *J. Infectious Diseases.* 54: 368-387, 1934.
- * Howitt, B. F.
Immunological study of laboratory animals of 13 different strains of equine encephalomyelitis virus. *J. Immunol.* 29: 319-341, 1935.
- * Howitt, B. F.
Method of transmission of immunity to equine encephalomyelitis virus in guinea-pigs. *J. Infectious Diseases.* 61: 68-95, 1937.
- * Howitt, B. F. and van Herick, W.
Neutralizing antibodies against St. Louis and eastern encephalitic viruses in horses and fowl. *Proc. Soc. Exptl. Biol. Med.* 48: 247-250, 1941.

Kelser, R. A.
Prophylaxis in equine encephalomyelitis. *Cornell Vet.* 30: 350-358, 1940.
Vet. Bull. 1: 4-5, 1941.
- * Kissling, R. E.; Eidson, Martha E.; and Stamm, D. D.
Transfer of maternal neutralizing antibodies against Eastern equine encephalomyelitis virus in birds. *J. Infectious Diseases.* 95(2): 179-181, 1954.
Bull. Hyg. 185, 1955.

Kubes, Vladimir; and Diamante, A.
Cross immunity studies between Venezuelan equine encephalomyelitis virus and eastern, western and Argentine virus. *Bol. inst. invest. vet.* 1: 47-79, 1942.
Bull. Hyg. 18: 344, 1943.
- Labzoffsky, N. A.
Effect of time of contact at 37°C and hydrogen ion concentration on degree of neutralization of equine encephalomyelitis virus (eastern type) by immunity serum. *J. Infectious Diseases.* 79: 63-68, 1946.
- Lennette, E. H.; and Fox, J. P.
Anticorpos neutralizantes para a amostra leste do virus de encefalomielite equina em equideos no Brasil. *Mem. inst. Oswaldo Cruz.* 38: 85-92, 1943.
- Little, P. A.
Mouse protective test as uniform method of assay for anti-bacterial and antiviral sera. *J. Immunol.* 47: 97-100, 1943.
- Lyon, B. M.
Equine encephalomyelitis and its control. *North American Vet.* 19: 22-30, 1938.

VII. IMMUNIZATION & PROPHYLAXES: VACCINES

- * McLimans, W. F.
Inactivation equine encephalomyelitis virus by mechanical agitation. J. Immunol. 56: 385-391, 1947.
- * Maurer, F. D.; Kuttler, K. L.; Yager, R. H.; and Warner, A.
Immunization of laboratory workers with purified trivalent equine encephalomyelitis vaccine. J. Immunol. 68: 109-114, 1952. Biol. Abstr. #12435 (1952).
- * Merrill, M. H.
Quantitative studies on neutralization of equine encephalomyelitis virus and antibody in vitro. J. Immunol. 30: 185-192, 1936.
- * Merrill, M. H.
Quantitative studies on neutralization of equine encephalomyelitis virus by immune serum percentage law. J. Immunol. 30: 193-202, 1936.
- Mohler, J. A.
Control methods in infectious equine encephalomyelitis. Vet. Med. 33: 36-39, 1938.
- * Morgan, I. M.
Influence of age on rate of immune response of mice to formalized equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 44: 473-475, 1940.
- * Morgan, I. M.
Influence of age on susceptibility and on immune response of mice to Eastern equine encephalomyelitis virus. J. Exptl. Med. 74: 115-132, 1941.
- * Morgan, I. M.
Relation of age to immune response of mice to formalized equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 42: 501-503, 1939.
- * Morgan, I. M.; and Lavin, G. I.
Immunizing capacity of virus of Eastern equine encephalomyelitis inactivated by ultraviolet light. Proc. Soc. Exptl. Biol. Med. 47: 497-499, 1941.
- * Morgan, I. M.; and Olitsky, P. K.
Immune response of mice to active virus and to formalin-inactivated virus of eastern encephalomyelitis. J. Immunol. 42: 445-454, 1941.
- * Olitsky, P. K.; and Cox, H. R.
Active immunization of guinea pigs with virus of equine encephalomyelitis; quantitative experiments with various reparations of active virus. J. Exptl. Med. 63: 311-324, 1936.
- * Olitsky, P. K.; and Harford, C. G.
Intraperitoneal and intracerebral routes in serum protection tests with virus of equine encephalomyelitis: comparison of antiviral serum constituents from guinea pigs immunized with active or formalized inactive virus. J. Exptl. Med. 68: 779-787, 1938.
- * Olitsky, P. K.; and Harford, C. G.
Intraperitoneal and intracerebral routes in serum protection tests with virus of equine encephalomyelitis: comparison of 2 routes in protection tests. J. Exptl. Med. 68: 173-184, 761-772, 1938.

VII. IMMUNIZATION & PROPHYLAXES: VACCINES

- * Olitsky, P. K.; and Morgan, I. M.
Studies on active and passive immunity resulting from inoculations of formolized inactivated and of active virus of equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 95: 530-533, 1939.
- * Randall, R.
Preparation of equine encephalomyelitis vaccine (Chick) by the Army Veterinary School. Vet. Bull. 34: 7-12, 1940.
- * Randall, R.; Mills, J. W.; and Engel, L. L.
Preparation and properties of purified equine encephalomyelitis vaccine. J. Immunol. 55: 41-52, 1947.
- Records, E. and Vawter, L. R.
Equine encephalomyelitis cross immunity in horses between western and eastern strains of virus. J. Amer. Vet. Med. Assoc. 85: 89-95, 1934.
Biol. Abstr. #5284 (1935).
- Records, E. and Vawter, L. R.
Equine encephalomyelitis cross-immunity in horses between western and eastern strains of virus. (Suppl. rept.). J. Amer. Vet. Med. Assoc. 86: 773-777, 1935.
- * Sabin, A. B.
Protective action of nasally instilled immune serum against infection with certain neurotropic viruses by way of nose. J. Exptl. Med. 63: 863-867, 1936.
- * Schlesinger, R. W.
Symposium on mechanisms of immunity to viruses: local immune response and viral growth rate as factors in immunity to equine encephalomyelitis virus. Federation Proc. 8: 622-624, 1949.
- * Schlesinger, R. W.; Olitsky, P. K.; and Morgan, I. M.
Observations on acquired cellular resistance to equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 54: 272-273, 1943.
- * Schoening, H. W.
Reactions following administration of equine encephalomyelitis vaccine. J. Amer. Vet. Med. Assoc. 97: 39-40, 1940.
- * Shahan, M. S.; and Eichhorn, E. A.
Studies of chick-embryo propagated equine encephalomyelitis virus and vaccine: antigenicity and preparation. Amer. J. Vet. Research. 2: 218-220, 1941.
- Shahan, M. S. and Giltner, L. T.
Experimental studies on equine encephalomyelitis formolized brain tissue vaccine. North Amer. Veterinarian. 16: 18-26, 1935.
Vet. Bull. 6: 126, 1936.
- Shahan, M. S. and Giltner, L. T.
Some aspects of infection and immunity in equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 64: 928-934, 1934.
- Shahan, M. S. and Giltner, L. T.
Vaccination against equine encephalomyelitis. Vet. Med. 34: 137, 1939.

VII. IMMUNIZATION & PROPHYLAXES; VACCINES

- * Sharp, D. G.; Taylor, A. R.;
Finkelstein, H.; Beard, D.;
and Beard, J. W.
Immunization with non-infect-
ious formalin derivative of
purified equine encephalomyelitis
virus protein. Proc. Soc. Exptl.
Biol. Med. 43: 650-652, 1940.
- Smorodintsev, A. A.; Kagan, N. V.;
and Levkovich, E. N.
Experimental and epidemicologic
data on active immunization against
tick-borne encephalitis. Arch.
sci. biol. USSR. 62, 1941.
- * Taylor, A. R.; Sharp, D. G.;
Beard, D.; Finkelstein, H.; and
Beard, J. W.
Influence of ultraviolet light
on equine encephalomyelitis virus
protein. (Eastern strain). J.
Infectious Diseases. 69: 224-
231, 1941.
- * Ten Broeck, C. and Heriott,
R. M.
Viruses inactivated by
mustard (Bis-B-chloroethyl
sulfide) as vaccines. Proc.
Soc. Exptl. Biol. Med. 62:
271-272, 1946.
- * Traub, E.; and TenBroeck, C.
Protective vaccination of
horses with modified equine
encephalomyelitis virus.
Science. 81: 572, 1935.

VIII. THERAPY

- Hurst, E. W.; Melvin, P. and
Peters, J. M.
The prevention of encephalitis
due to the viruses of eastern
equine encephalomyelitis and
louping-ill. Experiments with
trypan red, mapacrine, and many
other substances. Brit. J.
Pharmacol. 7: 455-472, 1952.
Bull. Hyg. 28: 403, 1953.
- Hurst, E. W. Peters, J. M. and
Melvin, P.
The action of mapacrine and
trypan red in a number of virus
diseases. Brit. J. Pharmacol.
& Chemotherapy. 7: 473-481,
1952.
Bull. Hyg. 28: 404, 1953.
- * Kempf, J. E.; and Soule, M. H.
Unsuccessful therapy in
experimental encephalomyelitis
with salt solutions of varied
concentrations and sulfanil-
amide compounds. Proc. Soc.
Exptl. Biol. Med. 44: 107-
110, 1940.
- * Olitsky, P. E. and Cox, H. R.
Temporary prevention by chem-
ical means of intra-nasal in-
fection of mice with equine
encephalomyelitis virus.
Science. 80: 566-567, 1934.

VIII. THERAPY

- * Radeleff, R. D.
Sodium iodine therapy in infectious equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 109: 129-132, 1946.
- * Sanders, Murray; Kabara, J. J.; Soret, M. G.; and Akin, B. A.
Interaction between eastern equine encephalomyelitis virus and certain resorcinol derivatives. Amer. J. Pathol. 28: 515, 1952.
- * Schaeffer, Morris; Silver, F. F.; and Pi, Chin Chao.
Studies on the chemotherapy of virus infections. I. General anesthetics and other drugs effective against experimental virus infections in mice. J. Immunol. 63: 109-115, 1949.
- * Sulkin, S. M.; Zarafonetic, C.; and Goth, A.
Influence of anesthesia on experimental neurotropic virus infections. I. In vivo studies with the viruses of western and eastern equine encephalomyelitis, St. Louis encephalitis, poliomyelitis and rabies. J. Exptl. Med. 84: 277-292, 1946.
- * Watanabe, T.; Higginbotham, R. D.; and Gebhardt, L.
Effect of sodium monofluoroacetate on multiplication of Eastern equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 80(4): 758-761, 1952.

IX. MAMMALS & AVIAN HOSTS & EXPERIMENTAL STUDIES

- Beaudette, F. R.
Equine encephalomyelitis in avian hosts. Proc. U. S. Livestock Sanit. Assoc. 43rd Annual Meeting. p. 185-203, 1939.
- * Beaudette, F. R., and Black, J. J.
Equine encephalomyelitis in New Jersey pheasants in 1945-1946. J. Amer. Vet. Med. Assoc. 112: 140-147, 1948.
- * Beaudette, F. R., Black, J. J., and Hudson, C. B.
Another case of equine encephalomyelitis in New Jersey pheasants. J. Amer. Vet. Med. Assoc. 98: 449-451, 1941.
- * Beaudette, F. R.; Black, J. J.; Hudson, C. B.; and Bivins, J. A.
Equine encephalomyelitis in pheasants from 1947-1951. J. Amer. Vet. Med. Assoc. 121(909): 478-483, 1952.
- * Beaudette, F. R., and Hudson, C. B.
Additional outbreaks of equine encephalomyelitis in New Jersey pheasants. J. Amer. Vet. Med. Assoc. 107: 384-386, 1945.
- * Chamberlain, R. W.; Sikes, R. K.; and Kissling, R. E.
Use of chicks in Eastern and Western equine encephalitis studies. J. Immunol. 73(2): 106-114, 1954.
Bull. Hyg. 30(3): 266, 1955.

IX. MAMMALS & AVIAN HOSTS & EXPERIMENTAL STUDIES

- * Cor, H. R.; and Olitsky, P. K.
Prevention of experimental equine encephalomyelitis in guinea pigs by means of virus adsorbed on aluminum hydroxide. *Science*. 79: 459, 1934.
- Cunha, Raymundo.
Verification of antibodies of eastern equine encephalomyelitis virus in serum of horses of north-eastern Brazil. *Rev. brasil biol.* 3: 425-430, 1943.
Biol. Abstr. #24044 (1944).
- Davis, William A.
Experiments on the role of birds and mosquitos on the epidemiology of equine encephalomyelitis. *J. Bact.* 39: 42, 1940.
- * Davis, W. A.
Study of birds and mosquitoes as hosts for the virus of eastern equine encephalomyelitis. *Amer. J. Hyg.* 32: 45-59, 1940.
- * Feathergill, LeRoy D., and Dingle, J. A.
A fatal disease of pigeons caused by the virus of the eastern variety of equine encephalomyelitis. *Science*. 88: 549-550, 1936.
- Giltner, L. T.
Equine encephalomyelitis in birds. *Diseases of Poultry*. Biester and de Vries. 7: 475-479, 1943.
- * Hurst, E. W.
Infection of rhesus monkey (*Macaca mulatta*) and guinea-pig with virus of equine encephalomyelitis. *J. Pathol. Bact.* 42: 271-302, 1936.
- Hurst, E. W.
Some observations on the pathogenesis of eastern equine encephalomyelitis and louping-ill in young and old animals, with special reference to routes of entry of the viruses into the nervous system. *J. Comp. Pathol. Therap.* 60: 237-262, 1950.
- * Howitt, B. F.
Immunological study in laboratory animals of 13 different strains of equine encephalomyelitis virus. *J. Immunol.* 29: 319-341, 1935.
- * Kempf, J. E.; Pierce, M. E.; and Soule, M. H.
Rate of disappearance of the Eastern equine encephalomyelitis virus from blood of rabbits following the injection of India ink. *Mer. J. Pathol.* 17: 453, 1941.
- * King, Lester S.
Infection of the mouse with modified and unmodified strains of eastern equine encephalomyelitis. *J. Bact.* 39: 43, 1940. (Abstract)
- * King, L. S.
Studies on eastern equine encephalomyelitis. IV. Infection in the mouse with fresh and fixed virus. *J. Exptl. Med.* 71: 95-106, 1940.
- * King, L. S.
Studies on eastern equine encephalomyelitis: facilitation of infection in mouse. *J. Exptl. Med.* 76: 325-334, 1942.

IX. MAMMALS & AVIAN HOSTS & EXPERIMENTAL STUDIES

* King, L. S.

Studies on eastern equine encephalomyelitis; intraocular infection with fixed virus in guinea pigs. J. Exptl. Med. 69: 691-704, 1939.

* Kissling, R. E.; Chamberlain, Roy; Eidson, M. E.; Sikes, R. K.; and Buaca, M. A.

Studies of the North American arthropod-borne encephalitides. II. Eastern equine encephalitis in horses. Amer. J. Hyg. 60(3): 237-250, 1954.

* Kissling, R. E. Chamberlain, Roy; Sikes, R. K. and Eidson, M. E.

Studies on the North American arthropod-borne encephalitides. III. Eastern equine encephalitis in wild birds. Amer. J. Hyg. 60(3): 251-265, 1954.

Kitaoka, Masami; Ogata, Takayuki; and Kudc, Yuzo.

Distribution of the virus in the organs of mouse after testicular inoculation with Eastern and western equine encephalomyelitis. Virus (Kyoto Univ.). 2: 263-266, 1952. Biol. Abstr. #13390 (1953).

* Lennette, E. H. and Koprowski, H.

Influence of age on the susceptibility of mice to infection with certain neurotropic viruses. J. Immunol. 49: 175-181, 1944.

* Livesay, H. R.

Isolation of eastern equine encephalomyelitis virus from naturally infected monkey. J. Infectious Diseases 84: 306-308, 1949.

* Meyer, K. F.; Wood, F.; Haring, C. M.; and Howett, B.

Susceptibility of non-immune, hyperimmunized horses and goats to eastern, western and Argentine virus of equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 32: 56-58, 1935.

* Morgan, Isabel M.

Influence of age on the rate and degree of the response of mice to eastern equine encephalomyelitis virus. J. Bact. 39: 43-44, 1940.

Remlinger, P.; and Bailly, J.

Receptivity of monkey to the virus of American equine encephalomyelitis. Bull. acad. med. Paris. 129: 105-106, 1945.

Schoening, H. W.

Epizootiology of infectious equine encephalomyelitis in the United States. Vet. Bull. 34: 13-19, 1940.

* Schoening, H. W., Giltner, L. T., and Shahan, M. S.

Equine encephalomyelitis produced by inoculation of human encephalitis virus. Science. 88: 409-410, 1938.

Sellards, A. W., Tyzzer, E. E., and Bennett, B. L.

Infection of birds with the virus of equine encephalomyelitis. Amer. J. Hyg. 33: 63-68, 1941.

Simmons, J. S.

Transmission of encephalomyelitis in the horse and possible vectors in the human being. New England J. Med. 220: 956-958, 1938.

IX. MAMMALS & AVIAN HOSTS & EXPERIMENTAL STUDIES

- * Sooter, G. A.; Howitt, B. F.;
and Gorrie, Rachael.
Encephalitis in midwest.
IX. Neutralizing antibodies in
wild birds of midwestern states.
Proc. Soc. Exptl. Biol. Med. 79:
507-509, 1953.
- * Syverton, J. T.; and Berry, G. P.
Host range of equine encephalo-
myelitis: susceptibility of the
North American cottontail rabbit,
jack rabbit, field vole, wood-
chuck and opossum to experimental
infection. Amer. J. Hyg. 32:
19-23, 1940.
- * Syverton, J. T.; and Berry, G. P.
Transmission of equine encephalo-
myelitis to the western burrowing
owl, *Speotyto cunicularia hypugaea*
(Bonaparte). Amer. J. Hyg. 33:
37-41, 1941.
- * TenBroeck, C.
Birds as possible carriers of
the virus of equine encephalo-
myelitis. Arch. Pathol. 25:
759, 1938. (Abstract)
- * Tyzzer, E. A.; Sellards, A. W.;
and Bennett, B. L.
Occurrence in nature of equine
encephalomyelitis in the ring-
necked pheasant. Science. 88:
505-506, 1938.
- * VanRoekel, H.; and Clarke, M. K.
Equine encephalomyelitis virus
(eastern type) isolated from
ring-necked pheasant. J. Amer.
vet. Med. Assoc. 94: 466-468,
1939.
- * Watson, W. D.; and Smadel, J. E.
Susceptibility of hamsters to
peripheral inoculation of western,
eastern, and West Nile encephalitis
viruses. Proc. Soc. Exptl. Biol.
Med. 52: 101-104, 1943.

X. ANIMAL PATHOLOGY

- * King, L. S.
The pathology of eastern equine
encephalomyelitis in guinea pigs.
Amer. J. Pathol. 14: 636-637,
1938.
- * King, L. S.
Studies on eastern equine
encephalomyelitis: histopatho-
logy of nervous system in
guinea-pig. J. Exptl. Med.
68: 677-692, 1938.
- * King, L. S.
Studies on eastern equine
encephalomyelitis: histopatho-
logy in mouse. J. Exptl. Med.
71: 107-112, 1940.
- * King, L. S.
Studies on eastern equine
encephalomyelitis: pathogenesis
of disease in guinea-pig. J.
Exptl. Med. 69: 675-690, 1939.
- * Sabon, A. B. and Olitsky, P. K.
Age of host and capacity of
encephalomyelitis viruses to
invade central nervous system.
Proc. Soc. Exptl. Biol. Med. 38:
597-599, 1938.
- Santos, J. A. dos and Cunha, R.
Histopathology of equine
encephalomyelitis in animals
inoculated with Pernambuco strain
eastern type. Rev. brasil biol.
5: 107-116, 1940.

X. ANIMAL PATHOLOGY

- * Tyzzer, E. E.; and Sellards, A. W.
 Pathology of equine encephalo-
 myelitis in young chickens.
 Amer. J. Hyg. 33: 69-81, 1941.
- Vivoli, D., and Vivoli, M. D.
 Estudio anatomopatológico de
 dos casos de encefalomiелitis
 aguda a virus equino. Rev.
 assoc. med. argentina. 62:
 484-488, 1948.

XI. ARTHROPOD VECTORS & EXPERIMENTAL STUDIES

- * Abdel-Malek, A.
 Biology of Aedes trivittatus.
 J. Econ. Entomol. 41: 951-954,
 1948.
- * Chamberlain, Roy W.; Corrigan,
 E. C.; and Sikes, R. K.
 Studies on the North American
 arthropod-borne encephalitides.
 V. The intrinsic incubation of
 eastern and western equine
 encephalitis in mosquitoes.
 Amer. J. Hyg. 50(3): 269-277,
 1954.
- * Chamberlain, Roy W.; Kissling,
 R. E.; and Sikes, R. K.
 Studies on the North American
 arthropod-borne encephalitides.
 VII. Estimation of the amount of
 Eastern equine encephalitis virus
 inoculated by Aedes aegypti.
 Amer. J. Hyg. 63(3): 286-291,
 1954.
- * Chamberlain, R. W.; Rubin, H.;
 Kissling, R. E. and Eidson, M. E.
 Recovery of virus of eastern
 equine encephalomyelitis from a
 mosquito, Culiseta melanura
 (Coquillett). Proc. Soc. Exptl.
 Biol. Med. 77: 125-129, 1951.
 Ibid: 77: 396-397, 1951.
 Biol. Abstr. #1533 (1952).
- * Chamberlain, R. W.; and Sikes, R. K.
 Laboratory investigations on the
 role of bird mites in the trans-
 mission of eastern and western
 equine encephalitis. Amer. J.
 Trop. Med. Hyg. 4(1): 106-118,
 1955.
- * Chamberlain, R. W.; and Sikes, R. K.
 Laboratory rearing methods for
 three common species of bird mites.
 J. Parasitol. 36: 461-465, 1950.
- * Chamberlain, R. W.; and Sikes, R. K.
 A safe method of handling mos-
 quitoes for virus transmission
 experiments. J. Parasitol. 36:
 499-500, 1950.
- Davis, William A.
 Experiments on the role of
 birds and mosquitoes on the
 epidemiology of equine encephalo-
 myelitis. J. Fact. 39: 42,
 1940.
- * Davis, W. A.
 Study of birds and mosquitoes
 as hosts for the virus of eastern
 equine encephalomyelitis. Amer.
 J. Hyg. 32: 45-59, 1940.
- Fennster, R. F. and Gettings, V. A.
 Distribution of the vectors of
 equine encephalomyelitis in Mass-
 achusetts. Amer. J. Public Health.
 31: 791-802, 1941.

XI. ARTHROPOD VECTORS & EXPERIMENTAL STUDIES

- * Ferguson, F. F.
Biological factors in the transmission of arthropod-borne virus encephalitides. (Bibl). Public Health Monog. #23, 1954.

Find encephalitis virus in birds, insects. J. Amer. Vet. Med. Assoc. 113: 464, 1948.
- * Hammon, W. McD.
The arthropod-borne virus encephalitides. Amer. J. Trop. Med. 28: 515-525, 1948.

Henderson, J. L.
Arthropod-borne encephalitides of North America. New Orleans Med. Surg. J. 97: 22-29, 1944.
- * Holder, P. Miller, Betty J. and Jobbins, D. M.
Isolations of Eastern equine encephalomyelitis virus from mosquitoes (*Culiseta melanura*) collected in New Jersey. Proc. Soc. Exptl. Biol. Med. 87(2): 457-459, 1954.
Bull. Hyg. 30(4): 288-289, 1955.
- * Howitt, B. F., Dodge, H. R., Bishop, L. K. and Gorrie, R. H.
Discovery of the virus of eastern equine encephalomyelitis from mosquitoes (*Mansonia perturbans*) collected in Georgia. Science, 110: 141-142, 1949.
- * Howitt, B. F., Dodge, H. R., Bishop, L. K. and Gorrie, R. H.
Virus of eastern equine encephalomyelitis isolated from chicken mites (*Dermanyssus gallinae*) and chicken lice (*Eimeriacanthus stramineus*). Proc. Soc. Exptl. Biol. Med. 68: 622-625, 1948.
- Jarmann, P. J.
The relation of mosquitoes to equine encephalomyelitis in Massachusetts. Proc. New Jersey Mosquito Exterminators Assoc. 27th Annual Meeting. 27: 12-18, 1940.
- * Kelser, R. A.
Methods of exposing experimental animals to virus infection through mosquito vectors. Amer. J. Public Health. 30: 866-870, 1940.
Vet. Bull. 11: 453, 1941.
- * Kelser, R. A.
Mosquito transmission of equine encephalomyelitis. Proc. Internat. Congr. Microbiol., 3rd., 1940. p. 300, 1940.
- Kelser, R. A.
Mosquitoes as vectors of the virus of equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 35: 767-771, 1933.
- Kelser, R. A.
Newer researches regarding tropical and subtropical diseases. Army Vet. Bull. 33: 339-354, 1939.
Also Intern. vet. Congr. 13th rpt. 2: 774-780, 1938.
(Discussion pp. 808-809. in Eng. & Fr.)
Vet. Bull. 10: 642, 1940.
- * Kelser, R. A.
Transmission of virus of equine encephalomyelitis by *Aedes taeniorhynchus*. J. Amer. Vet. Med. Assoc. 22: 195-203, 1938.
Also Science. 85: 178, 1937.

XI. ARTHROPOD VECTORS & EXPERIMENTAL STUDIES

Kissling, R. E.

Host-vector relationships in Eastern equine encephalomyelitis. Proc. Vth Intern. vet. Congr. Stockholm. 1, Pt. 1: 299-304, 1953.

Vet. Bull. 24(5): #1494 (1954).

Manzelli, M. A.

A survey of the arthropod vectors of equine encephalomyelitis and encephalitis. J. New York Entomol. Soc. 56: 79-107, 1948.

Merrill, Malcolm H.

Mosquitoes as a possible vector of equine encephalomyelitis. Proc. Calif. Mosquito Control Assoc. 11: 23-31, 1940.

* Merrill, M. H.; Iacaille, C. W., Jr.; and TenBroeck, C.

Mosquito transmission of equine encephalomyelitis. Science. 80: 251-252, 1934.

Merrill, M. H.; and TenBroeck, C.

Multiplication of equine encephalomyelitis virus in mosquitoes. Proc. Soc. Exptl. Biol. Med. 32: 421-423, 1934.

* Merrill, M. H. and TenBroeck, C.

Transmission of equine encephalomyelitis virus by *Aedes aegypti*. J. Expt. Med. 60: 687-695, 1935.

* Mohler, J. R.

Incidence of equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 102: 454-457, 1943.

* Philip, C. B.

Flowers as a suggested source of mosquitoes during encephalitis studies, and incidental mosquito records in the Dakotas in 1941. J. Parasitol. 29(5): 328-329, 1943.

* Reeves, W. C.; and Hammon, W. M.

Mosquitoes and encephalitis in the Yakima Valley, Washington. IV. A trap for the collecting of live mosquitoes. J. Infectious Diseases. 70: 275-277, 1942.

* Schaeffer, M.; Arnold, E. H.;

Kissling, R. E.; Chamberlain, R. W.; Eidson, M. E.; Sikes, R. K.; Bucca, M. A.; Vansilla, J.; Corrigan, E. C.; Nelson, D. B.; and Sudia, W. D.

Studies on North American arthropod-borne encephalitides. I-VII. Amer. J. Hyg. 60: 231-291, 1954.

* TenBroeck, C. and Merrill, M. H.

Transmission of equine encephalomyelitis by mosquitoes. Amer. J. Pathol. 11: 847, 1935.

* Trager, W.

Multiplication of virus of equine encephalomyelitis in surviving mosquito tissues. Amer. J. Trop. Med. 18: 387-393, 1938.

XII. EPIDEMIOLOGY

GENERAL EPIDEMIOLOGY

- * Epidemic encephalitis in retrospect. New England J. Med. 240: 983-984, 1949.
- * Feemster, R. F.
Outbreak of encephalitis in man due to the eastern virus of equine encephalomyelitis. Amer. J. Public Health. 28: 1403-1410, 1938.
- * Infectious equine encephalomyelitis in the United States in 1939. Public Health Repts. 55: 601-602, 1940.
- * Randall, R.; and Eichorn, E. A.
Westward spread of eastern type equine encephalomyelitis virus. Science. 93: 595, 1941.
- * Shahan, M. S.; and Giltner, L. T.
Review of the epizootology of equine encephalomyelitis in the United States. J. Amer. Vet. Med. Assoc. 107: 279-288, 1945.
- * Syverton, J. T.
Discussion on epidemiology of equine encephalomyelitis. Proc. Intern. Congr. Microbiol., 3rd Rept. p. 307-307, 1940.
- * TenBroeck, Carl.
Transmission of equine encephalomyelitis. Proc. Intern. Congr. Microbiol., 3rd Rept. p. 300-301, 1940.
- * Transmission of virus encephalitis. Public Health Repts. 69(11): 1095-1096, 1954.

LABORATORY INFECTIONS

- Bohls, S. W.; and Irons, J. V.
Laboratory observations on virus encephalitis. Texas State J. Med. 38: 260-264, 1942.
- * Olitsky, P. K. and Morgan, I. M.
Protective antibodies against equine encephalomyelitis virus in serum of laboratory workers. Proc. Soc. Exptl. Biol. Med. 41: 212-215, 1939.
- * Sulkin, S. E.; and Pike, R. M.
Viral infections contracted in the laboratory. New England J. Med. 241: 205-213, 1949.

EPIDEMIC COUNTRIES

UNITED STATES

- * Adams, R. D., and Weinstein, L.
Clinical and pathological aspects of encephalitis. New England J. Med. 239: 865-876, 1948.
- * Beaudette, F. R.; Black, J. J.; and Hudson, C. B.
Another case of equine encephalomyelitis in New Jersey pheasants. J. Amer. Vet. Med. Assoc. 68: 442-443, 1941.

EPIDEMIC COUNTRIES

UNITED STATES

- * Brown, G. C.
Studies on equine encephalomyelitis in Michigan. J. Infectious Diseases. 81: 48-54, 1947.
- Brueckner, A. L.; Poelma, L.; Everson, C. L.; and Reed, R. C.
Equine encephalomyelitis. Maryland Agric. Exptl. Sta. Bull. #369: 137-146, 1934.
- * Farber, S.; Hill, A.; Connerley, M. L.; and Dingle, J. H.
Encephalitis in infants and children. J. Amer. Med. Assoc. 114: 1725-1731, 1940.
- Flower, E. P.
Encephalomyelitis, eastern type in Louisiana. New Orleans Med. Surg. J. 101: 112-114, 1948.
- Getting, V. A.
Equine encephalomyelitis in Massachusetts: an analysis of the 1938 outbreak, a follow-up of cases and a report of a mosquito survey. New England J. Med. 224: 999-1006, 1941.
- Giltner, L. T. and Shaban, M. S.
The 1933 outbreak of infectious equine encephalomyelitis in the eastern States. North Amer. Vet. 14: 25-27, 1933.
- Giltner, L. T. and Shaban, M. S.
The present status of infectious equine encephalomyelitis in the United States. J. Amer. Vet. Med. Assoc. 80: 363-374, 1936.
- * Gordon, J. E.
Infection of man with virus of equine encephalomyelitis. Amer. J. Med. Sci. 198: 437-441, 1939.
- Hammon, W. M.
Encephalitides of virus origin with special reference to those of North America. Clinics. 4: 485-503, 1945.
- * Hammon, W. M.
Equine encephalitis; eastern and western equine and St. Louis types as observed in 1941 in Washington, Arizona, New Mexico, and Texas. J. Amer. Med. Assoc. 121: 560-566, 1943.
- * Hanson, R. P.; Scott, G. R.; Ferris, D.; and Upton, E.
Eastern equine encephalomyelitis in Wisconsin. Amer. J. Trop. Med. Hyg. 3(1): 54-56, 1954.
Biol. Abstr. #21430 (1954).
- Hauser, G. H.
Human equine encephalomyelitis, eastern type in Louisiana. New Orleans Med. Surg. J. 100: 551-558, 1948.
- * Howitt, B. F.; Bishop, L. K.; Gormie, R. H.; Kissling, R. E.; Hauser, G. H. and Trusting, W. L.
Outbreak of equine encephalomyelitis, eastern type in south-western Louisiana. Proc. Soc. Exptl. Biol. Med. 68: 70-72, 1948.
- * Infectious equine encephalomyelitis in the United States 1951. J. Amer. Vet. Med. Assoc. 121(906): 164-165, 1952.
- Liao, Sung J.
Eastern equine encephalitis in Connecticut: a serological survey of pheasant farmers. Yale J. Biol. Med. 27(4): 287-296, 1955.

EPIDEMIC COUNTRIES

UNITED STATES

- * McAdams, J. C.; and Porter, J. E.
Encephalitis in man caused by the virus of equine encephalomyelitis. Report of a case in an adult. New England J. Med. 221: 163-166, 1939.

Miller, A. W.

Report on infectious equine encephalomyelitis in the United States in 1943. Washington, D. C., U. S. Bur. Animal Industry, 1944. 4pp.

- * Miller, A. W.
Report of infectious encephalomyelitis in the United States in 1944. J. Amer. Vet. Med. Assoc. 107: 10-13, 1945.

Miller, K. G.; Kelly, G. P.; and Schaeffer, M. F.

Human infection with virus of equine encephalomyelitis, eastern type in Louisiana. New Orleans Med. Surg. J. 100: 270-273, 1947.

- * Mohler, J. R.
Brief history of infectious equine encephalomyelitis and related affections in the United States. J. Amer. Vet. Med. Assoc. 96: 451-453, 1941.

- * Mohler, J. R.
Infectious equine encephalomyelitis in the United States in 1940. J. Amer. Vet. Med. Assoc. 98: 381-382, 1941.

Mohler, J. R.

Report of the chief of the Bureau of Animal Industry, U. S. Dept. Agric. p. 50, 1941.

Mohler, J. R.

Report on infectious equine encephalomyelitis in the United States in 1941. Processed Pub. U.S.D.A. 8pp. 1942.

Mohler, J. R.

Report on outbreak of infectious equine encephalomyelitis in the United States, 1935-1937. Washington, D. C., U. S. Bur. Animal Industry, 1938. 4pp.

Mohler, J. R.

Report on the 1938 outbreak of infectious equine encephalomyelitis in the United States. Washington, D. C., U. S. Bur. Animal Industry, 1939. 5pp.

Mohler, J. R.

Report on infectious equine encephalomyelitis in the United States in 1939. Washington, D. C., U. S. Bur. Animal Industry, 1940. 5pp.

Mohler, J. R.

Report on infectious equine encephalomyelitis in the United States in 1940. Washington, D. C., U. S. Bur. Animal Industry, 1941. 5pp.

Mohler, J. R.

Report on infectious equine encephalomyelitis in the United States in 1941. Washington, D. C., U. S. Bur. Animal Industry, 1942. 8pp.

Mohler, J. R.

Report on infectious equine encephalomyelitis in the United States in 1942. Washington, D. C., U. S. Bur. Animal Industry, 1943. 8pp.

EPIDEMIC COUNTRIES

UNITED STATES

- * Oglesby, W. T.
1947 outbreak of infectious equine encephalomyelitis in Louisiana. J. Amer. Vet. Med. Assoc. 113: 267-270, 1948.
- * Osteen, O. L.
Infectious equine encephalomyelitis: midwinter case. J. Amer. Vet. Med. Assoc. 94: 441-442, 1939.
- Randall, Raymond.
Notes on the New England outbreak of equine encephalomyelitis. Vet. Bull. Suppl. Army Med. Bull. 33: 87-95, 1937.
- * Reeves, William C.
Encephalitis problem in the United States. Amer. J. Public Health. 41: 678-686, 1951.
- Shahan, M. S., Galtner, L. T. and Schoening, H. W.
Review of the 1938 outbreak of infectious equine encephalomyelitis in the United States. Proc. U. S. Livestock Sanit. Assoc. 42d Annual Meeting. 145-157, 1938.
- Simms, B. T.
Report on infectious equine encephalomyelitis in the United States in 1945. Washington, D. C., U. S. Bur. Animal Industry. 1946. 4pp.
- * Also: J. Amer. Vet. Med. Assoc. 109: 191-193, 1946.
- Simms, B. T.
Report on infectious equine encephalomyelitis in the United States in 1947. Washington, D. C., U. S. Bur. Animal Industry. 1948. 4pp.
- Simms, B. T.
Report on infectious equine encephalomyelitis in the United States in 1948. Washington, D. C., U. S. Bur. Animal Industry. 1949. 4pp.
- * Also: J. Amer. Vet. Med. Assoc. 117: 210-211, 1950.
- Simms, B. T.
Report on infectious equine encephalomyelitis in the United States in 1950. Washington, D. C., U. S. Bur. Animal Industry. 1951. 4pp.
- * Also: J. Amer. Vet. Med. Assoc. 119: 110-111, 1951.
Biol. Abstr. #9279 (1952).
- Simms, B. T.
Report on infectious equine encephalomyelitis in the United States in 1953. Animal Disease & Parasite Res. Branch U. S. Govt. June 10, 1954.
- * Tenhaken, C., Hurst, E. W. and Traub, E.
Epidemiology of equine encephalomyelitis in the eastern United States. J. Exptl. Med. 63: 677-685, 1935.
- * Vawter, L. R. and Records, E.
Respiratory infection in equine encephalomyelitis. Science. 78: 41-42, 1933.

MISCELLANEOUS COUNTRIES

Alice, F. J.

Equine infectious encephalomyelitis in Brazil. Proc. Vth Congr. bras. vet. Sao Paulo, 1950. p. 585-608, 1951. Vet. Bull. #2826 (1953).

Carneiro, V. ; and Cunha, R.

Studies on infectious equine encephalomyelitis in Brazil. Arquiv. inst. biol. (Sao Paulo). 14: 157-194, 1943.

Como fue combatido y esterminada el brote de encefalomielitis equina en la Republica Dominicana. Agriculture. 70: 1-41, 1949.

* Eklund, G. M.; Bell, J. F.; and Brennan, J. M.

Antibody survey following an outbreak of human and equine disease in the Dominican Republic caused by the eastern strain of equine encephalomyelitis virus. Amer. J. Trop. Med. 31: 312-328. 1951.

Eklund, G. M. Brennan, J. M., and Bell, J. F.

Final report to the Pan American Sanitation Bureau regarding the 1948-1949 outbreak of eastern equine encephalitis in the Dominican Republic. Bol. ofic. sanit. panameri. 29: 493-516, 1950.

Kelser, R. A.

Equine encephalomyelitis in Panama. Army Vet. Bull. 31: 19-21, 1937.

* Also: Army Med. Bull. 31: 1, 1937.

* Mace, D. L.; Otto, R. L.; and Cortez, F. S.

Evidence of the presence of equine encephalomyelitis virus in Philippine animals. Bull. U. S. Army Med. Dept. 9: 504-507, 1949.

* Also: J. Amer. Vet. Med. Assoc. 115: 268, 1948. (Abstract)

* Reeves, W. C.

Epidemiology of the arthropod-borne virus encephalitis. A Pan-American problem. Bol. ofic. sanit. panameri. 27: 347-355, 1948.

* Steele, J. H., and Habel, K.

Observations on an outbreak of encephalomyelitis in Panama. J. Amer. Vet. Med. Assoc. 111: 263-268, 1947.

Tellez, G. A.

La presencia del virus type este de la encefalomiélitis equina en el epizootica ocurrida en el estado de Tamaulipas, Mexico durante 1941. Re. inct. Pecuario. 1: 36-44, 1941.

PART III. WESTERN EQUINE ENCEPHALOMYELITIS

I. GENERAL

- Adamson, J. D.; Bowman, M.; and MacDonnell, J. A.
The future of Western equine encephalitis. Manitoba Med. Rev. 30: 366-368, 1950.
- * American Health Association.
Control of communicable diseases in man. 7th ed., N. Y. 1950. (pp. 45-47).
- * Birch, F. M.
Studies in equine encephalomyelitis. Amer. J. Vet. Research. 2: 221-226, 1941.
- * Cameron, G. D. W.
Western equine encephalitis. Can. J. Public Health. 33: 383-387, 1942.
- Cockburn, T. A.; Price, E. R.; and Rowe, J. A.
Encephalitis in the Midwest. I. A review of the problem. J. Kansas Med. Soc. 99: 316-318, 1951.
- Eklund, C. M.
Encephalitis. Massachusetts Med. 24: 723-725, 1941.
- Eklund, C. M.
Human encephalitis due to virus of equine encephalomyelitis. Vet. Med. 37: 70-76, 1942.
- * Eklund, C. M. and Blumstein, A.
Equine encephalomyelitis in man. Brit. Med. J. 1: 877, 1939.
- * Eklund, C. M. and Blumstein, A.
Relation of human encephalitis to encephalomyelitis in horses. J. Amer. Med. Assoc. 111: 1734-1735, 1936.
- Encephalitis investigations. C.D.C. Bull. April-June, 1949, 47.
" " " " Oct.-Dec. " 53.
* " " " " 9: 11-12, 1950.
* " " " " 9: 15-17, 1950.
- Equine encephalomyelitis. Intern. Med. Dig. 39: 314-317, 1941.
- Equine encephalomyelitis and human encephalitis; three neurotropic viruses now known to affect both humans and animals. North Amer. Veterinarian. 22: 665-669, 1941.
- * Finley, Knox H.
Virus encephalomyelitides. Med. Clin. N. Amer. 37: 373-394, 1953.
- Fothergill, LeRoy D.
Equine encephalomyelitis in man. Trans. Amer. Neurol. Assoc. 65: 9, 1939.
- * Fulton, J. S. and Burton, A. N.
Western equine encephalomyelitis. Can. Med. Assoc. J. 69: 268-272, 1953.
- * Giltner, L. T. and Shahan, M. S.
Equine encephalomyelitis. Yearbook of Agric. Washington, D. C. U. S. Govt. Printing Office. p. 375-381, 1942.
- * Giltner, L. T. and Shahan, M. S.
Horse disease, known as encephalomyelitis, yielding to research. Yrbk. Agric. Washington, U. S. Govt. Printing Office. p. 233-236, 1935.
- * Haymaker Webb and Smadel, Joseph.
Viral encephalitides. Washington: Regester Press, 1943.

I. GENERAL

- * Howitt, B. F.
Equine encephalomyelitis.
J. Infectious Diseases. 51:
493-510, 1952.
- Howitt, B. F.
Relationship of St. Louis and
Western equine viruses of
encephalitis to man and animals
in California. Proc. 12th
Annual Conf. Calif. Mosquito
Control. p. 3-23, 1942.
- * Jordan, R. T.; and Duffy, G. E.
Interference between St. Louis
encephalitis virus and Western
equine encephalomyelitis virus
along a neuronal pathway. J.
Infectious Diseases. 91(2):
165-172, 1952.
Bull. Hyg. 29(5): 536, 1954.
- Kelser, R. A.
Equine encephalomyelitis.
Vet. Bull. Suppl. Army Vet.
Med. Bull. 34(1): 1-6, 1940.
(A review)
- * Also: Ann. N. Y. Acad. Sci.
48: 385, 1947.
Biol. Abstr. #2544 (1941).
- * Kelser, R. A.
Personal communication to
Dr. J. S. Simmons. 1935. Amer.
J. Trop. Med. 15: 289-302,
1935.
- Larimer, R. A. and Wiesser,
E. G.
Human equine encephalomyelitis.
J. Iowa Med. Soc. 29: 267-269,
1939.
- Lyon, B. F.
Present status of equine
encephalomyelitis and its con-
trol. Cornell Vet. 24: 1-14,
1934.
- Malsen, D. E.
Equine encephalomyelitis.
Proc. Utah Acad. Sci. 11:
95-99, 1934.
- Marsh, H.
Losses of undertimed cause
following an outbreak of equine
encephalomyelitis. J. Amer. Vet.
Med. Assoc. 91: 88-93, 1937.
Vet. Bull. 8: 572, 1938.
- * Matheson Commission. 3rd Report.
Epidemic encephalitis. N. Y.
Columbia, 1939. (Bibl. of some
length on all types).
- Meyer, K. F.
Equine encephalomyelitis.
North Amer. Veterinarian. 14:
30-48, 1933.
- Meyer, K. F.
Neurotropic virus infections
of the horse. Proc. Pacific
Sci. Congr. 5th: 2915-2925,
1933.
- * Meyer, K. F., Haring, C. M.,
and Howitt, B.
Newer knowledge of the neuro-
tropic virus infections of the
horse. J. Amer. Vet. Med.
Assoc. 22: 376-389, 1931.
- Mitchell, C. A.
Virus diseases with special
reference to encephalomyelitis.
Can. J. Comp. Med. 4: 273-277,
1940.
- * Monier, J. R.
Brief history of infectious
equine encephalomyelitis and
related affections in the United
States. J. Amer. Vet. Med.
Assoc. 22: 451-463, 1941.

I. GENERAL

- * Mohler, J. R.
Infectious equine encephalomyelitis in the United States in 1940. J. Amer. Vet. Med. Assoc. 98: 381-382, 1941.
- * New developments in knowledge of encephalitis. J. Amer. Med. Assoc. 117: 1361-1363, 1941.

New virus disease of horses. North Amer. Veterinarian. 22: 651-652, 1941.
- * Olitsky, P. K.; Cox, H. R.; and Syverton, J. T.
Comparative studies on viruses of vesicular stomatitis and equine encephalomyelitis. J. Exptl. Med. 59: 159-171, 1934.
- Panisset, M.
A disease of animals transmissible to man. Equine encephalomyelitis. Union med. Canada. 70: 597-601, 1941.
- * Price, E. R.
Western equine encephalomyelitis. CDC Bull. 9: 5-6, 1950.
- Randall, R.
Equine encephalomyelitis. Vet. Bull. U. S. Army. 36: 157-171, 1942.
- * Also: Military Surgeon. 41: 659-670, 1942.
- * Randall, R.
Equine encephalomyelitis of virus type. Military Surgeon. 96: 233-237, 1943.
- Records, E., Vawter, L. R.; Baker, F. H.; and Woodward, G. T.
Equine encephalomyelitis. Univ. Nevada Agric. Exptl. Sta. Bull. #132, 1933.
- Reeves, W. C.
Observations on the natural history of western equine encephalomyelitis. Proc. U. S. Livestock sanit. assoc. 49th Annual Meeting. p. 150-158, 1945.
- * Rivers, T. M.
Viral and rickettsial infections of man. Philadelphia, Pa., J. B. Lippincott Co., 1948. 587 pp.
- * Sabin, Albert B.
Insectborne virus disease of military importance. Military Med. 116(4): 245-251, 1955.
- * Schoening, H. W.
Equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 95: 268-271, 1939.
- * Smith, K. M.
Virus: life's enemy. N. Y., Cambridge Univ. Press, 1940.
- * Syverton, J. T., and Cox, H. R., and Olitsky, P. K.
Relationship of the viruses of vesicular stomatitis and of equine encephalomyelitis. Science. 78: 216-217, 1933.
- * VanRoven, C. E., and Rhodes, A. J.
Virus diseases of man. N. Y., T. Nelson & Sons, 1948.

II. DIAGNOSIS, DETECTION, & IDENTIFICATION

- Alice, F. J.
Equine encephalomyelitis in Bahia; study of three isolated strains. *Rev. brasil biol.* 11: 125-144, 1951.
Biol. Abstr. #4121 (1952).
- * Casals, J.
Diagnosis of epidemic encephalitis by complement-fixation tests. *Amer. J. Public Health.* 31: 1281-1284, 1941.
- * Casals, J.
Technique and practical applications of complement-fixation test for diagnosis of infection with encephalitis viruses. *J. Bact.* 50: 1-5, 1945.
- * Casals, J. and Palacios, R.
The complement-fixation test in the diagnosis of virus infections of the central nervous system. *J. Exptl. Med.* 74: 409-425, 1941.
- * Casals, J. and Palacios, R.
Diagnosis of epidemic encephalitis by complement-fixation test. *Science.* 94: 330, 1941.
- * Chanock, Robert M. and Sabin, Albert.
The hemagglutination of western equine encephalitis virus. Recovery properties and use for diagnosis. *J. Immunol.* 13(5) 337-352, 1954.
Biol. Abstr. #382 (1955).
- * Chown, B. and Norris, J.
Virus of western equine encephalitis in spinal fluid. *J. Amer. Med. Assoc.* 120: 11-17, 1942.
- * Cox, H. A.; and Fite, G. L.
Serological distinctions between the viruses of encephalitis in St. Louis, 1933, equine encephalomyelitis and vesicular stomatitis. *Proc. Soc. Exptl. Biol. Med.* 31: 499-500, 1934.
- * DeBoer, G. J.; and Cox, H. R.
Specific complement-fixation diagnostic antigens for neurotropic viral diseases. *J. Immunol.* 55: 193-204, 1947.
- * DeBoer, G. J.; and Van der Scheer, James; Richmond, Gilbert; Hazz, Edna; and Cox, H. R.
Electrophoretic studies on hyperimmune rabbit sera for neurotropic viruses. *J. Immunol.* 69: 605-610, 1952.
- * Grundmann, A. W. and Leymaster, G. R.
Equine encephalomyelitis in Utah: a survey of horses and man utilizing serum-neutralization tests. *J. Amer. Vet. Med. Assoc.* 124(922): 40-42, 1954.
Biol. Abstr. #1531 (1955).
- * Gwatkin, R. and Hoyzkan, I. W.
Recovery of equine encephalomyelitis virus (western type) from human spinal fluid in Alberta. *Can. J. Public Health.* 34: 42-43, 168-170, 1943.
- * Hammon, W. M. and Reeves, W. C.
Certain bacteriostatic agents added to sera used in diagnostic tests for neurotropic virus infections. *Proc. Soc. Exptl. Biol. Med.* 50: 84-88, 1945.

II. DIAGNOSIS, DETECTION, & IDENTIFICATION

- * Hammon, W. M.; Reeves, W. C.; and Sather, Gladys.
California encephalitis virus, a newly described agent. II. Isolations and attempts to identify and characterize the agent. J. Immunol. 69: 493-510, 1952.
- * Howitt, B. F.
Complement-fixation test with human sera against viruses of St. Louis encephalitis and equine encephalomyelitis. J. Immunol. 47: 293-302, 1943.
- * Howitt, B. F.
Recovery of virus of equine encephalomyelitis (western type) from human blood serum. Science. 89 541-542, 1939.
- * Howitt, B. F.
Recovery of virus of equine encephalomyelitis from brain of child. Science. 88. 455-456, 1938.
- * Irons, J. V.; Bohls, S. W.; and Albert, Dorothy.
Comparison of mouse and egg tests with titrations of equine encephalomyelitis virus. J. Bact. 45 79, 1943.
- * McKee, F. E.
Diagnostic tests for encephalitis. Maryland Med. Rev. 33: 169, 1943.
- * Mettlegrob, G.; Ruet, E.; and Brunetti, O.
Comparison of diagnostic methods for western equine and St. Louis encephalitis. J. Immunol. 62 223-300, 1949.
- * Milzer, A.
Routine laboratory diagnosis of virus and rickettsial diseases. J. Amer. Med. Assoc. 143: 219-224, 1950.
- * Schofield, F. S.
Isolation and identification of the virus of equine encephalomyelitis. Can. J. Public Health. 31: 31-32, 1940.
- Shahan, M. S.; and Giltner, L. T.
Equine encephalomyelitis studies. I. Cross-immunity tests between eastern and western types of virus. J. Amer. Vet. Med. Assoc. 86: 764-772, 1935.
- * Shahan, M. S.; and Giltner, L. T.
Identity of viruses from cases of equine encephalomyelitis during 1942. J. Amer. Vet. Med. Assoc. 102: 271-275, 1943.
- Shahan, M. S.; Giltner, L. T.; and Osteen, O. L.
Isolation and typing of equine encephalomyelitis virus. Cornell Vet. 30 151-160, 1940.
- * Skinefield, H. R.; Lennette, E. H.; and Longmore, W. A., Jr.
Experimental observations on a skin test antigen for western equine encephalomyelitis. J. Immunol. 64 173-187, 1955.
- * Tappin, C. E.
Interference between influenza and equine encephalomyelitis viruses in tissue culture. J. Immunol. 71 125-133, 1953.
Biol. Abstr. #14244 (1954).

II. DIAGNOSIS, DETECTION, & IDENTIFICATION

- * TenBroeck, C., and Merrill, M. H.
Serological difference between eastern and western equine encephalomyelitis viruses. Proc. Soc. Exptl. Biol. Med. 31: 217-220, 1933.

III. ETIOLOGY & CULTURE

- * Bang, F. B.
Course of experimental infection of chick embryo with virus of equine encephalomyelitis. J. Exptl. Med. 77: 337-344, 1943.
- * Bang, F. B., and Gey, G. O.
Electron microscopy of tissue cultures infected with virus of eastern equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 71: 77-80, 1949.
- * Bauer, J. H., Cox, H. H., and Olitsky, P. K.
Ultrafiltration of virus of equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 33: 378-382, 1935.
- Bender, W. L.
Epidemic encephalitis. Present status of etiology and treatment. Calif. & Western Med. 27: 623-629, 1927.
- Covell, W. P.
Intranuclear inclusions in brain of chick embryo after inoculation of egg with virus of equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 34: 50-53, 1934.
- * Donaldson, P., and Clark, P. F.
Colloidal particle adsorption of equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 35: 165-168, 1935.
- * Dulbecco, R., and Vogt, M.
One-step growth curve of Western equine encephalomyelitis virus on chicken embryo cells grown in vitro and analysis of virus yields from single cells. J. Exptl. Med. 99(2): 183-199, 1954.
Excerpta Med. (IV) #180 (1955).
- * Duffy, C. E.
Interference between St. Louis encephalitis virus and encephalomyelitis virus (Western type) in chick embryo. Science. 99: 517-518, 1944.
- * Fastner, L. B.
Infectivity titrations of the viruses of Western equine encephalomyelitis and Newcastle disease by tissue culture methods. J. Immunol. 72: 341-347, 1954.
and Abstr. 2(3) 571, 1955.
- * Gebel, W. A., Olitsky, P. K., and Saenz, A. J.
Inactivation of biologically active proteins and virus of Western equine encephalomyelitis by periodic acid. J. Exptl. Med. 87: 443-455, 1948.
- * Hagbin, E., and Hewitt, B.
Behavior of virus of equine encephalomyelitis in chorio-allantoic membrane of developing chick. J. Bact. 29: 399-406, 1935.

III. ETIOLOGY & CULTURE

- * Howitt, B. F.
Moscow 2 strain as compared with other strains of equine encephalitic viruses. J. Infectious Diseases. 63: 269-286, 1938.
- * Huang, C. H.
Further studies on titration and neutralization of western strain of equine encephalomyelitis in tissue culture. J. Exptl. Med. 78: 111-126, 1943.
- * Huang, C. H.
Titration and neutralization of western strain of equine encephalomyelitis virus in tissue culture. Proc. Soc. Exptl. Biol. Med. 51: 396-398, 1942.
- * Krueger, A. P., Howitt, B. and Zeiler, V.
The particle size of the virus of equine encephalomyelitis. Science, 77: 288-289, 1933.
- * Lazarus, A. S. and Howitt, B. F.
Ultrafiltration of virus of equine encephalomyelitis. (Russian Strain Moscow #2. Proc. Soc. Exptl. Biol. Med. 36: 595-596, 1937.
Ver. Bull. 6: 154, 1938.
- * Lennette, E. H. and Koprowski, H.
Interference between viruses in tissue culture. J. Exptl. Med. 63: 145-212, 1940.
- Neuling, P. and Bailey, J.
Action of sodium ricinoleate on the virus of equine encephalomyelitis. Compt. rend. soc. biol. 142: 603-606, 1936.
- Rubin, Harry; Baluda, Marcel; and Hotchin, John E.
The maturation of western equine encephalomyelitis virus and its release from chick-embryo cells in suspension. J. Exptl. Med. 101(2): 205-212, 1955.
- * Sanders, M. and Molloy, E.
Cultivation of virus of equine encephalomyelitis in serum-ultrafiltrate and buffered salt solution (Simms). Proc. Soc. Exptl. Biol. Med. 45: 327-332, 1940.
- * Scherr, W. F. and Syverton, J. T.
The viral range in vitro of a malignant human epithelial cell (strain He La Gey). II. Studies with encephalitis viruses on the Eastern, Western, West Nile, St. Louis, and Japanese B. types. Amer. J. Pathol. 30(6): 1075-1083, 1954.
- * Sharp, D. G., Taylor, A. R., Beard, D. and Beard, J. W.
Electron micrography of western strain equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 51: 206-207, 1942.
- * Sharp, D. G., Taylor, A. R., Beard, D. and Beard, J. W.
Morphology of Eastern and Western strains of virus of equine encephalomyelitis. Arch. Pathol. 30: 167-176, 1943.

III. ETIOLOGY & CULTURE

- * Sharp, D. G.; Taylor, A. R.;
Beard, Dorothy; Finkelstein,
Harold; and Beard, J. W.
Macromolecular component of
chick embryo tissue diseases
with western strain equine
encephalomyelitis virus. Proc.
Soc. Exptl. Biol. Med. 42: 790-
792, 1939.
- * Siem, R. A.; Smith, B. G.; and
McLimans, W. F.
Oxygen uptake of embryonated
eggs infected with Western equine
encephalitis virus. Science.
112: 505-506, 1950.
- * Smith, W. M.; and Evans, C. A.
Growth of neurotropic viruses
in extraneural tissues. (Culti-
vation of MM and Western equine
encephalitis viruses in cultures
of rhesus testicular tissue. J.
Immunol. 72(5): 353-359, 1954.
Excerpta Med. (IV) #1231 (1955).
- * Sulkin, S. E. and Goth, A.
Effect of aspergillic acid on
equine encephalomyelitis virus.
Proc. Soc. Exptl. Biol. Med. 56
16-18, 1945.
- * Sulkin, S. E. and Zarafonitis, C.
Influence of anesthesia on
experimental neurotropic virus
infections. In vitro studies with
the viruses of western and eastern
equine encephalomyelitis. St. Louis
encephalitis, poliomyelitis and
rabies. J. Exptl. Med. 85: 559-
569, 1947.
- * Syverton, J. T.; Cox, H. R.; and
Olitsky, P. K.
Relationship of viruses of
vesicular stomatitis and of
equine encephalomyelitis.
Science. 78: 216-217, 1933.
- * Taylor, A. R., Sharp, D. G.;
Finkelstein, H.; Beard, D.; and
Beard, J. W.
Improved sequence for rapid
consistent purification of
equine encephalomyelitis virus
protein. Proc. Soc. Exptl.
Biol. Med. 43: 648-650, 1940.
- * Victor, J. and Huang, C.H.
Depression of anaerobic gly-
colysis of embryonic tissue by
western strain of equine encephal-
omyelitis virus: prevention of
this effect by specific immune
serum. J. Exptl. Med. 79: 129-
138, 1944.

IV. CLINICAL PICTURE CASE HISTORIES

- * Adamsen, J. D. and Doherty, S.
Clinical findings in encephal-
itis (western equine). Can.
Public Health J. 35: 298-300,
1942.
- * Also Can. Med. Assoc. J. 46
530-537, 1942.
- Baker, A. B. and Norman, H. H.
Western variety of encephal-
itis in man: clinicopathology
study. Arch. Neurol. Psychiat.
47: 565-587, 1942.

IV. CLINICAL PICTURE: CASE HISTORIES

- Bruyn, H. B.; and Leunette, E. H.
Western equine encephalitis in infants; a report on three cases with sequelae. Calif. Med. 79(5): 362-366, 1953.
- Davis, J. H.
Equine encephalomyelitis (western type) in children; residual atrophy of brain. J. Pediat. 16: 591-595, 1940.
- Finley, K. H.; Kokernot, R. H., and Leunette, E.H.
Preliminary nine months follow-up of over two hundred and fifty cases of Western equine and St. Louis encephalomyelitis from a 1952 summer epidemic. Trans. Amer. Neurol. Assoc. 1953, 78th Annual Meeting, p. 22-25, 1953. Excerpta Med. (VI) #2228 (1955).
- * Fulton, J. S., and Burton, A. N.
After effects of western equine encephalomyelitis infection in man. Can. Med. Assoc. J. 69(3): 268-272, 1953.
- Hannon, W. M.
Encephalomyelitis of virus origin with special reference to those of North America. Clinica. 4: 485-503, 1943.
- Johnson, B. S., and Barnes, L. V.
Equine encephalomyelitis: a report of three questionable cases. Wisconsin Med. J. 38: 484-486, 1939.
- * McGugan, A. C.
Equine encephalomyelitis (western type) in humans in Alberta 1941. Can. J. Public Health, 33: 148-151, 1942.
- Medovy, H.
Western equine encephalomyelitis in infants. J. Pediat. 22: 308-318, 1943.
* Also: Can. Public Health J. 33: 307-312, 1942.
- Mitchell, C. A.; Walker, R. V. L.; and McArcher, D. G.
Clinical symptoms of encephalomyelitis in artificially infected horses. Can. J. Comp. Med. 2: 271-275, 1938.
- Mulder, D. W.
Western equine encephalitis. Diseases of Nervous System. 12: 259-264, 1951. Biol. Abstr. #12623 (1952).
- Mulder, D. W.; Parrott, M.; and Thaler, M.
Sequelae of western equine encephalitis. Neurology. 1: 318-327, 1951.
- * Moran, H.H.
Chronic equine encephalitis. Amer. J. Pathol. 20: 259-267, 1944.
- Nelson, H. H., and Baker, A. B.
Sequelae of equine encephalomyelitis. Arch. Neurol. & Psychiat. 45: 398-413, 1943.
- Prater, R. V.
Equine encephalomyelitis in infants. Amer. J. Diseases Child. 40: 1155-1169, 1940.
- * Richner, R. B.
Case of western equine encephalomyelitis occurring sporadically in a metropolitan area. Report of a case. J. Amer. Med. Assoc. 124: 486-487, 1942.

IV. CLINICAL PICTURE: CASE HISTORIES

Shahan, M. S.; Giltner, L. T.;
Davis, C. L.; and Huffman, W. T.
"Secondary" disease occurring
subsequent to infectious equine
encephalomyelitis. Vet. Med.
34: 354-358, 1939.
Vet. Bull. 10: 24, 1940.

Sulkin, S. M.
Human encephalitis due to
western equine encephalomyelitis
virus. Texas State Med. 41:
455-458, 1946.

V. HUMAN PATHOLOGY

- Bruyn, H. B.; and Lennette, E. H.
Western equine encephalitis in
infants; a report on three cases
with sequelae. Calif. Med. 79(5):
362-366, 1953.
- Davis, J. H.
Equine encephalomyelitis
(western type) in children;
report of cases with residual
atrophy of brain. J. Pediat.
16: 591-595, 1940.
- * Hurst, E. W.
Histology of equine encephalo-
myelitis. J. Exptl. Med. 59:
529-542, 1934.
- * Larsell, O.; Haring, C. M. and
Meyer, K. F.
Histologic changes in central
nervous system following encephalo-
myelitis. Amer. J. Pathol. 10:
361-374, 1934.
- * Nickle, M.; and Kabat, H.
Specificity in effects on
brain metabolism of 2 differing
neurotropic viruses. J. Exptl.
Med. 80: 247-255, 1944.
- * Peers, J. H.
Equine encephalomyelitis
(western) in man; histologic
and anatomic study. Arch.
Pathol. 34: 1050-1064, 1942.
- * Quong, T. L.
Pathology of western equine
encephalomyelitis: 18 human
cases, Manitoba epidemic, 1941.
Can. J. Public Health. 33: 300-
306, 1942.

VI. VIABILITY

- * Bach, C. E. and Wykoff, R. W. G.
Antigenic stability of western
equine encephalomyelitis virus.
Science. 68: 164, 1936.
- * Remlinger, P. and Bailey, J.
Effects of high temperatures on
rapidly dried viruses of Andes and
diseases and equine encephalo-
myelitis. Compt. rend. acad. Sci.
139: 460-461, 1948.
- * Shahan, M. S.
Preservation of dried equine
encephalomyelitis virus in
vacuum-sealed tubes. J. Amer.
Vet. Med. Assoc. 102: 216,
1943.

VII. SEROLOGY

- Alice, F. J.
Equine encephalomyelitis in Bahia; study of three isolated strains. *Rev. brasil biol.* 11: 125-144, 1951.
Biol. Abstr. #4121 (1952).
- * Beck, C. E.; and Wyckoff, R. W. G.
Antigenic stability of western equine encephalomyelitis virus. *Science*. 88: 264, 1938.
- * Brown, G. G.
Embryonic chick antigens for complement fixation with viruses of eastern and western encephalomyelitis. *Proc. Soc. Exptl. Biol. Med.* 56: 91-93, 1944.
- Buttitta, P. L.; and Basilico, Y.
Further epidemiological and serological research on Western equine encephalitis. *Boll. soc. ital. biol. sper.* 28(7): 1534-1535, 1952.
- * Casals, J.
Heated avirulent antigens for complement fixation tests with certain encephalitis viruses. *Science*. 102: 618-619, 1945.
- * Casals, J.
Immunologic relationship among central nervous system viruses. *J. Exptl. Med.* 77: 341-359, 1944.
- * Casals, J.
Nonvirulent virus and dried antigens for complement fixation tests with central nervous system virus infections. *Science*. 97: 337-338, 1943.
- * Daniels, R. F.; Wagner, J. C.; Cheneria, C. L.; and Andrew, W. L.
Influence of certain serum factors on neutralization of western equine encephalomyelitis virus. *Proc. Soc. Exptl. Biol. Med.* 77: 139-143, 1943.
- * Duffy, C. E.; Jordan, R. T.; and Meyer, H. M.
Effect of multiple inoculations on interference between St. Louis encephalitis and equine encephalomyelitis virus. *Proc. Soc. Exptl. Biol. Med.* 80: 279-281, 1952.
Biol. Abstr. #35247 (1952).
- * Eichhorn, A.; and Wyckoff, R. W. G.
Immunological studies on equine encephalomyelitis. *J. Amer. Vet. Med. Assoc.* 93: 285-290, 1938.
- * Espana, C.; and Hammon, W. M.
Improved benzene extracted complement fixing antigen for certain neurotropic viruses. *Proc. Soc. Exptl. Biol. Med.* 66: 101-102, 1947.
- * Gwatkin, R.
Neutralization tests with equine encephalomyelitis virus. *Can. J. Comp. Med.* 5: 138-144, 1941.
- * Hammon, W. M.; and Izumi, E. M.
Virus neutralization test, subject to standardization used with western encephalitis virus. *J. Immunol.* 43: 149-157, 1942.
- Havens, W. P.; Watson, D. W.; Green, R. H.; Lavin, G. I.; and Snader, J. E.
Complement fixation with the neurotropic viruses. *J. Exptl. Med.* 77: 139-143, 1943.
- * Howitt, Beatrice F.
Complement fixation reaction in experimental equine encephalomyelitis, lymphocytic choriomeningitis, and the St. Louis type of encephalitis. *J. Immunol.* 33: 235-250, 1937.
Vet. Bull. 8: 522, 1938.

VII. SEROLOGY

- * Howitt, B. F.
Complement fixation test differentiating three strains of equine encephalomyelitis virus and virus of pyrophocytic chorio-meningitis. *Proc. Soc. Exptl. Biol. Med.* 35: 526-528, 1937.
- * Howitt, B. F.
Cross immunization experiments with poliomyelitis virus and that of encephalomyelitis in horses. *Proc. Soc. Exptl. Biol. Med.* 29: 118-120, 1931.
- * Howitt, B. F.
Development of neutralizing antibodies to viruses of equine encephalomyelitis (western strain) and St. Louis encephalitis in blood and cerebrospinal fluid of man and animals, together with recovery of St. Louis virus from blood of monkeys. *J. Immunol.* 42: 117-131, 1941.
- * Howitt, B. F. and Meyer, K. F.
Tests for cross immunity between virus of Borne disease and that of equine encephalomyelitis. *J. Infectious Diseases.* 54: 364-367, 1934.
- * Howitt, B. F. and Van Herick, W.
Neutralizing antibodies against St. Louis and Western equine encephalitis viruses in horses and fowl. *Proc. Soc. Exptl. Biol. Med.* 48: 247-250, 1941.
- * Hutson, G. A., Howitt, B. F. and Cockburn, T. A.
Encephalitis in midwest. VIII. Neutralizing antibodies in sera of small wild mammals. *Proc. Soc. Exptl. Biol. Med.* 77: 291-293, 1951.
Biol. Abstr. #154 (1952).
- * Kennel, George T.
Studies on the immunology of toxin substances produced by streptococci isolated from equine encephalomyelitis. *J. Amer. Med. Assoc.* 95: 730-732, 1939.
- * Koprowski, H.; Richmond, G.; and Moore, D. H.
Electrophoretic study of antiviral sera. *J. Exptl. Med.* 85: 515-530, 1947.
- * Miles, J. A. R.; and Howes, D. W.
Encephalitis virus isolated in South Australia. II. Serological observations on the virus and its relation to other arthropod born encephalitides. *Australian J. Exptl. Biol. Med. Sci.* 30: 295-307, 1952.
- * Mohler, W. M.
Complement fixation with chick-embryo antigen in equine encephalomyelitis. *J. Amer. Vet. Med. Assoc.* 94: 39-43, 1959.
- * Morgan, I. M.
Quantitative study of neutralization of Western equine encephalomyelitis virus by its anti-serum and effect of complement. *J. Immunol.* 50: 299-371, 1943.
- * Morgan, I. M.; Schlesinger, R. W. and Oratsky, P. E.
Neutralizing antibodies in the cerebrospinal fluid in relation to cerebral resistance to equine encephalomyelitis virus. *J. Bact.* 43: 83-84, 1942.

VII. SEROLOGY

- Records, E., and Vawter, L. R.
Equine encephalomyelitis anti-
serum. J. Amer. Vet. Med. Assoc.
82: 608-616, 1933.
- Rice, C. E.
Studies on the complement-
fixation reaction in virus
systems; equine encephalo-
myelitis virus antigens and
antisera. Cornell Vet. 37:
341-348, 1947.
- * Ruchman, I.
Effect of nutritional defic-
iciencies on development of neutral-
izing antibodies and associated
changes in cerebral resistance
against virus of western encephal-
omyelitis. J. Immunol. 53: 51-
74, 1946.
- * Schlesinger, R. W.
Mechanism of active cerebral
immunity to equine encephalo-
myelitis virus. J. Exptl. Med.
89: 491-527, 1949.
- * Schlesinger, R. W.; Morgan,
I. M.; and Olitsky, P. K.
Significance of neutral-
izing antibody in experi-
mental encephalomyelitis;
relation to disease in man;
preliminary report. J. Amer.
Med. Assoc. 119: 618-620,
1942.
- * Whitman, L.
Neutralization of western
equine encephalomyelitis virus
by human convalescent serum;
influence of heat labile sub-
stance in serum on neutrali-
zation index. J. Immunol. 56:
97-108, 1947.
- * Wright, F. H.
Antibodies in human serum
which neutralize viruses of
equine encephalomyelitis;
experience with intraperi-
toneal mouse protection test.
Amer. J. Hyg. 36: 57-67,
1942.

VIII. IMMUNIZATION & PROPHYLAXES. VACCINES

- * Beard, J. W., Beard, D., and
Finkelstein, H.
Human vaccination against
equine encephalomyelitis (east-
ern and western strains). J.
Immunol. 30: 137-138, 1940.
- * Beard, D., Finkelstein, H.,
and Beard, J. W.
Repeated vaccination of man
against virus of equine
encephalomyelitis. J. Immunol.
40: 497-507, 1941.
- * Beard, J. W., Beard, D., and
Finkelstein, H.
Vaccination of man against
virus of equine encephalomye-
litis (eastern and western
strains). J. Immunol.
30: 137-138, 1940.
- * Beard, J. W., Finkelstein, H.,
Sealy, W. C., and Wyckoff,
R. W. G.
Immunization against equine
encephalomyelitis with chick
embryo vaccines. Science.
87: 400, 1938.
- * Bowman, M.
Vaccination of humans against
western equine encephalitis
virus. Can. J. Public Health.
36: 199-201, 1945.

VIII. IMMUNIZATION & PROPHYLAXES. VACCINES

- * Coulson, E. J.; and Stevens, H.
Allergenic and anaphylactogenic properties of vaccines prepared from embryonic tissues of developing chicks; anaphylactogenic properties of typhus-fever vaccines and equine encephalomyelitis vaccines. J. Immunol. 53: 321-342, 1946.
- * Cox, H. R.; and Olitsky, P. K.
The action of formalized virus as a preventive of experimental equine encephalomyelitis in guinea pigs. J. Bact. 31: 38, 1936.
- * Cox, H. R.; and Olitsky, P. K.
Prevention of experimental equine encephalomyelitis in guinea pigs by means of virus adsorbed on aluminum hydroxide. Science. 79: 459, 1934.
- Cunha, Raymond.
Equine encephalomyelitis.
Cross-immunity to the western type of virus, the eastern type and a virus isolated in Bahia. Bol. ministerio agric. (Brazil). 30: 1-7, 1942.
- * Engel, Lewis L. and Randall, Raymond.
Quantitative estimation of egg and chicken proteins in equine encephalomyelitis vaccines. J. Immunol. 55: 325-329, 1947.
- Gold, H.; and Harpal, B.
Results of skin tests following immunization against encephalomyelitis (eastern and western types) with bivalent vaccines of chick embryo origin. J. Allergy. 12: 138-142, 1943.
- * Graham, H.; and Levine, N. D.
Studies on equine encephalomyelitis; antigenic properties of pigeon-brain-tissue vaccine. Amer. J. Vet. Research. 2: 430-435, 1941.
- * Hammon, W. M.
Suggestions for the possible control of the American summer encephalitides. J. Amer. Med. Assoc. 118: 66-68, 1942.
- * Health, L. M.
Equine encephalomyelitis: serum neutralizing antibodies in man before and after vaccination. Can. J. Public Health. 36: 20-205, 1945.
- * Howitt, B. F.
Immunization of guinea-pigs to virus of equine encephalomyelitis. J. Infectious Diseases. 54: 368-387, 1934.
- * Howitt, B. F.
Immunological study in laboratory animals of 13 different strains of equine encephalomyelitis virus. J. Immunol. 29: 319-341, 1935.
- * Howitt, B. F.
Method of transmission of immunity to equine encephalomyelitis virus in guinea-pigs. J. Infectious Diseases. 61: 81-95, 1937.
- * Irons, J. V., Bohl, S. W., and Albert, Dorothy.
Virus-neutralizing antibody content of human sera following equine encephalomyelitis vaccination. J. Bact. 45: 200, 1943. (Abstract)

VIII. IMMUNIZATION & PROPHYLAXES. VACCINES

- Kelser, R. A.
Prophylaxis in equine encephalomyelitis. Cornell Vet. 30: 350-358, 1940.
Vet. Bull. 11: 443, 1941.
- Kubes, Vladimir; and Diamante, A.
Cross immunity studies between Venezuelan equine encephalomyelitis virus and eastern, western and Argentine virus. Bol. inst. invest. vet. 1: 47-79, 1942.
Bull. Hyg. 18: 344, 1943.
- * Lenette, E.H.; and Koprowski, H.
Comparative sensitivity of extraneural and intracerebral neutralization tests in following antibody response in man to vaccination with western equine encephalomyelitis virus. J. Immunol. 52: 343-353, 1946.
- Lyon, B. M.
Equine encephalomyelitis and its control. North Amer. Veterinarian. 19: 22-30, 1938.
- Lyon, B. M. and Wyckoff, H. W. G.
Chick vaccine for equine encephalomyelitis. Vet. Med. 33: 408, 1938.
- * McLimans, W. F.
Inactivation of equine encephalomyelitis virus by mechanical agitation. J. Immunol. 53: 385-391, 1947.
- MacInell, C. A., Walker, R. V. J., and Plummer, P. J. G.
Studies in equine encephalomyelitis: chick embryo vaccine as protective agent. Can. J. Comp. Med. 2: 211-222, 1938.
- Mohler, J. R.
Control methods in infectious equine encephalomyelitis. Vet. Med. 43: 34-37, 1948.
- Montevideo, J. J.; and Simeone, D. H.
Chick embryos surviving inoculation of equine strain of virus. Nature. 160: 680, 1947.
- * Olitsky, P. K.; and Cox, H. R.
Active immunization of guinea-pigs with virus of equine encephalomyelitis: quantitative experiments with various preparations of active virus. J. Exptl. Med. 63: 311-324, 1936.
- * Olitsky, P. K.; and Harford, C. G.
Intraperitoneal and intracerebral route in serum protection tests with virus of equine encephalomyelitis: comparison of 2 route in protection tests. J. Exptl. Med. 68: 173-189; 761-777, 1938.
- * Olitsky, P. K.; Morgan, I. M.; and Schlesinger, R. W.
Vaccination with various western equine encephalomyelitis viruses: comparison as antigens and as test inocula. Proc. Soc. Exptl. Biol. Med. 59: 93-97, 1945.
- Randall, R.
Preparation of equine encephalomyelitis vaccine (Chick) by the Army Veterinary School. Vet. Bull. 34: 7-12, 1940.
- * Randall, R., Mills, J. W., and Engel, L. L.
Preparation and properties of purified equine encephalomyelitis vaccine. J. Immunol. 55: 41-52, 1947.

VIII. IMMUNIZATION & PROPHYLAXES. VACCINES

Records, E.; and Vawter, L. R.

Equine encephalomyelitis cross immunity in horses between western and eastern strains of virus. J. Amer. Vet. Med. Assoc. 85: 89-95, 1934.

Biol. Abstr. #5284 (1935).

Vet. Bull. 4: 654, 1934.

Records, E.; and Vawter, L. R.

Equine encephalomyelitis cross-immunity in horses between Western and eastern strains of virus. (Suppl. rept.). J. Amer. Vet. Med. Assoc. 86: 773-777, 1935.

Biol. Abstr. #6288 (1936).

Vet. Bull. 6: 37, 1936.

Records, E.; and Vawter, L. R.

Equine encephalomyelitis immunization. J. Amer. Vet. Med. Assoc. 84: 784-798, 1934.

Biol. Abstr. #1193 (1936).

Rosenbusch, F.

La inmunizacion activa con el virus de la encefalomyelitis infecciosa en la Argentina. Estudio comparativo con el virus Californiano. An. soc. rur. argent. 68: 273, 1934.

* Ruchman, Isaac.

The effect of starvation on the development of immunity in mice after vaccination with western equine encephalomyelitis virus. J. Bact. 51: 403, 1945.

(Abstract)

* Schaeffer, Morris; Silber, F. F. and Pi, Chin Chao.

Studies on the chemotherapy of virus infections. I. General anesthetics and other drugs effective against experimental virus infections in mice. J. Immunol. 61: 11-15, 1947.

* Schlesinger, R. W.

Symposium on mechanisms of immunity to viruses; local immune response and viral growth rate as factors in immunity to equine encephalomyelitis virus. Federation Proc. 8: 622-624, 1949.

* Schlesinger, R. W.; Olitsky, P. K.; and Morgan, I. M.

Observations on acquired cellular resistance to equine encephalomyelitis virus. Proc. Soc. Exptl. Biol. Med. 54: 272-273, 1943.

* Schoening, H. W.

Reactions following administration of equine encephalomyelitis vaccine. J. Amer. Vet. Med. Assoc. 97: 39-40, 1940.

* Schoening, H. W.; Shahan, M. S.; Giltner, L. T., and Osteen, O. L.

The longevity of encephalomyelitis immunity induced in horses by vaccination. J. Amer. Vet. Med. Assoc. 102: 18-21, 1943.

Schoening, H. W., Shahan, M. S., Osteen, O. L., and Giltner, L. T.

Studies on the intradermal method of vaccination against equine encephalomyelitis. Vet. Med. 35: 322-323, 1940.

* Shahan, M. S., and Eichhorn, E. A.

Studies of chick-embryo propagated equine encephalomyelitis virus and vaccine; antigenicity and preservation. Amer. J. Vet. Research. 3: 219-223, 1941.

VIII. IMMUNIZATION & PROPHYLAXES. VACCINES

Shahan, M. S.; and Giltner, L. T.
Some aspects of infection and immunity in equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 84: 928-934, 1934.

Shahan, M. S.; and Giltner, L. T.
Vaccination against equine encephalomyelitis. Vet. Med. 34: 137, 1939.

Stull, Arthur.
Allergenic and anaphylactogenic properties of vaccines prepared from embryonic tissues of developing chicks. J. Immunol. 53: 343-354, 1946.

* Taylor, A. R.; Sharp, D. G.; Beard, D.; Finkelstein, H.; and Beard, J. W.

Concentration and partial purification of equine encephalomyelitis vaccines. Science. 92: 586-587, 1940.

Wolfe, W. R.; and Trum, B. F.

Anaphylactic reactions following the use of chick embryo equine encephalomyelitis vaccine. Vet. Bull. U. S. Army. 34. 226-228, 1940.

IX. THERAPY

Bender, W. L.
Epidemic encephalitis. Present status of etiology and treatment. Calif. & Western Med. 27: 625-629, 1927.

* Chung, S. F.
Protective effects of bacteria on western equine encephalomyelitis virus. J. Infectious Diseases. 78 216-222, 1946.

* Milzer, A.
Effect of pituitary adrenocortrophic hormone (Acth) on experimental poliomyelitis and equine encephalomyelitis. J. Infectious Diseases. 66: 54-55, 1951.

* Olitsky, P. K. and Cox, H. R.
Temporary prevention by chemical means of intra-nasal infection of mice with equine encephalomyelitis virus. Science 60 566-567, 1934.

* Olitsky, P. K. and Saenz, A. G.
Serum treatment of western encephalitis in mice determined by course of virus infection. Proc. Soc. Exptl. Biol. Med. 68: 200-204, 1948.

* Olitsky, P. K. Schlesinger, R. W., and Morgan, I. M.
Induced resistance of central nervous system to experimental infection with equine encephalomyelitis virus. serotherapy in western virus infection. J. Exptl. Med. 77 359-374, 1943.

* Radeloff, R. D.
Sodium saline therapy in infectious equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 109: 129-132, 1946.

Reberis, E. and Vawter, L. R.
Equine encephalitis antiserum. J. Amer. Vet. Med. Assoc. 82: 608-609, 1933.

IX. THERAPY

- * Rosenow, E. C.; and Caldwell, H. W.
Studies on the etiology and serum treatment of encephalitis during the epidemic in North Dakota and Minnesota. Proc. Staff Meetings Mayo Clin. 16(37): 587-588, 1941.
- * Sabin, A. B.
Quantitative studies on prophylactic effectiveness of Western equine encephalitis antiserum in mice. Proc. Soc. Exptl. Biol. Med. 78(2): 655-658, 1951.
Biol. Abstr. #8999 (1952).
- * Saphir, W. and Milzer, A.
Western equine encephalomyelitis in Chicago; report of patient successfully treated with gamma globulin. J. Amer. Med. Assoc. 140: 778-780, 1949.
- * Schlotthauer, C. F.
Treatment of western encephalomyelitis with certain sulfonamide compounds (sulfanilamide and its derivatives): experimental study. Proc. Staff Meetings Mayo Clin. 17: 187-189, 1942.
- * Sulkin, S. E. Zarafonitis, C. and Goth, A.
Combined anesthesia and hyperimmune serum therapy in treatment of experimental western equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 50: 143-145, 1945.
- * Zichis, J.
Duration of passive protection by hyperimmune Western equine encephalomyelitis. J. Bact. 45: 79, 1943. (Abstract)
- * Zichis, Joseph.
Studies in passive immunity produced with Western Equine encephalomyelitis antiserum. J. Bact. 47: 467, 1944.
- * Zichis, J.; and Shaughnessy, H. J.
Experimental western encephalomyelitis; successful treatment with hyperimmune rabbit serum. J. Amer. Med. Assoc. 115: 1071-1078, 1940.
- * Zichis, J.; and Shaughnessy, H. J.
Successful treatment of experimental western encephalomyelitis with hyperimmune rabbit serum. Amer. J. Public Health. 35: 815-823, 1945.
- * Zichis, Joseph; and Shaughnessy, H. J.
Treatment of experimental equine encephalomyelitis with hyperimmune rabbit serum. J. Bact. 41: 52-53, 1941.

X. MAMMALS & AVIAN HOSTS: EXPERIMENTAL STUDIES

- * Chamberlain, R. W. Sikes, R. K. and Kissling, R. E.
Use of chicks in Eastern and Western equine encephalitis studies. J. Immunol. 73(2): 105-114, 1954.
Bull. Hyg. 3: 266, 1955.
- * Cox, H. R., Jellison, W. L., and Hughes, L. E.
Isolation of western equine encephalomyelitis virus from a naturally infected prairie chicken. Public Health Repts. 56: 1905-1906, 1941.

X. MAMMALS & AVIAN HOSTS: EXPERIMENTAL STUDIES

- * Cox, H. R.; and Olitsky, P. K.
Prevention of experimental equine encephalomyelitis in guinea-pigs by means of virus adsorbed on aluminum hydroxide. Science. 79: 459, 1934.
- Duckworth, C. U.
Infectious equine encephalomyelitis. Proc. Calif. Mosquito Control Assoc. 11: 6-8, 1940.
- * Duffy, C. E.; Pehrson, G. C.; and Morgan, P.N.
Interference between Japanese B. encephalitis virus and Western equine encephalomyelitis virus in the rat. Proc. Soc. Exptl. Biol. Med. 81: 154-157, 1952.
- * Eklund, C.M. and Blumstein, A.
Relation of human encephalitis to encephalomyelitis in horses. J. Amer. Med. Assoc. 111: 1734-1735, 1938.
- * Farquharson, J.
Infectious equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 94: 459-465, 1939.
- * Fastier, L. B.
Toxic manifestations in rabbits and mice associated with virus of western equine encephalomyelitis. J. Immunol. 58: 531-542, 1952.
- * Gallagher, F. W.
Experimental mixed infection of mice with Lansing poliomyelitis virus and western equine encephalomyelitis virus. Science. 110: 301-302, 1949.
- Giltner, L. T.
Equine encephalomyelitis in birds. Diseases of Poultry. Biester and de Vries. 475-479, 1943.
- * Giltner, L. T. and Shahan, M. S.
Transmission of infectious equine encephalitis in mammals and birds. Science. 78: 63-64, 1933.
- Gwatkin, R.
Further examination of small mammals and birds in a search for carriers of equine encephalomyelitis virus. Can. J. Comp. Med. 5: 113-116, 1941.
- Gwatkin, R.; and Moore, T.
Indication of the presence of the virus of equine encephalomyelitis in the brain of ground squirrel. Can. J. Comp. Med. 4: 78-82, 1940.
- * Gwatkin, R.; and Moynihan, I. W.
Search for sources and carriers of equine encephalomyelitis virus. Can. J. Res. D. 20: 321-337, 1942.
- * Hammon, W. M.; Gray, J. A., Jr.; Evans, F. C.; and Izumi, E. M.
Western equine and St. Louis encephalitis antibodies in sera of mammals and birds from an epidemic area. Science. 94: 305-307, 1941.
- * Hammon, W. M.; Ludy, H. W.; Gray, J. A.; Evans, F. C.; Bang, F.; and Izumi, E. M.
A large-scale serum-neutralization survey of certain vertebrates as part of an epidemiological study of encephalitis of the western equine and St. Louis types. J. Immunol. 44: 75-86, 1942.

X. MAMMALS & AVIAN HOSTS: EXPERIMENTAL STUDIES

- * Hammon, W. M.; and Reeves, W. C.
Western equine encephalitis virus in the blood of experimentally inoculated chickens. J. Exptl. Med. 83: 163-173, 1946.
- * Hammon, W. McD.; Reeves, W. C.; and Sather, Gladys E.
Western equine and St. Louis encephalitis viruses in the blood of experimentally infected wild birds and epidemiological implications of findings. J. Immunol. 67: 357-368, 1951.
- Haring, C. N.; Howard, J. A.; and Meyer, K. F.
An infectious brain disease of horses and mules (encephalomyelitis). Calif. Agric. Exptl. Sta. Circ. #322: 1-14, 1931.
Also: North Amer. Veterinarian. 12: 29-36, 1931.
- * Holden, R. S.
Recovery of western equine encephalomyelitis virus from naturally infected English sparrows of New Jersey. Proc. Soc. Exptl. Biol. Med. 88(3): 490-492, 1955.
- * Howitt, B. F.
Comparative susceptibility of wild and domestic birds and animals to western virus of equine encephalomyelitis (Br. strain) in California. J. Infectious Diseases. 67: 177-187, 1940.
- * Howitt, B. F.
Immunological study in laboratory animals of 13 different strains of equine encephalomyelitis virus. J. Immunol. 29: 319-341, 1935.
- * Howitt, B. F.
Propagation of virus of equine encephalomyelitis after intranasal instillation in guinea-pig. Proc. Soc. Exptl. Biol. Med. 32: 58-60, 1934.
- * Howitt, B. F.; and Van Herrick, W.
Relationship of St. Louis and the western equine encephalitis viruses to fowl and mammals in California. J. Infectious Diseases. 71: 179-191, 1942.
- * Hurst, E. W.
Infection of rhesus monkey (*Macaca mulatta*) and guinea-pig with virus of equine encephalomyelitis. J. Pathol. Bact. 42: 271-302, 1936.
- * Kearny, E. B.; Pond, W. L.; Plass, B. A.; Maddy, K. H.; Elvehjem, C. H.; and Clark, P. F.
Effect of thiamine deficiency on western equine encephalomyelitis in mice. J. Infectious Diseases. 82: 177-186, 1948.
- Kitaoka, Masami, Ogata, Takayuki, and Kudo, Yuzo.
Distribution of the virus in the organs of mouse after testicular inoculation with Eastern and western equine encephalomyelitis. Virus (Kyoto Univ.). 2: 263-266, 1952.
Biol. Abstr. #13390 (1953).
- * Kitzelman, C. H.; and Grundman, A. W.
Virus of equine encephalomyelitis in the peripheral circulation of guinea-pigs and rabbits following artificial inoculation. Amer. J. Vet. Research. 10: 158-159, 1949.

X. MAMMALS & AVIAN HOSTS: EXPERIMENTAL STUDIES

- McNutt, S. H.; and Packer, A.
Isolation of western equine encephalomyelitis and hog-cholera viruses from supposedly hog-cholera-immune swine. *Vet. Med.* 38: 33-25, 1943.
- * Meyer, K. F.; Haring, C. M.; and Howitt, B.
The etiology of epizootic encephalomyelitis of horses in the San Joaquin Valley, 1930. *Science.* 74: 227-228, 1931.
- * Meyer, K. F.; Wood, F.; Haring, C. M.; and Howitt, B.
Susceptibility of non-immune, hyperimmunized horses and goats to eastern, western and Argentine virus of equine encephalomyelitis. *Proc. Soc. Exptl. Biol. Med.* 32: 56-58, 1935.
- Mitchell, G. A.; and Walker, R. V. I.
Studies in equine encephalomyelitis: susceptibility of some mammals and birds. *Can. J. Comp. Med.* 5: 314-319, 1941.
- Nai-Ch'iu, Chang; Liu, Young; and Liu, F. T.
Experimental encephalitis virus infection in the Chinese hamsters (a bacteriological and pathological study). *China Med. J.* 69: 420-426, 1951.
- Newson, I. E.
Encephalomyelitis of horses in Colorado. *Vet. Med.* 28: 132-135, 1933.
- Noran, H. H.; and Baker, A. B.
Western equine encephalitis: pathogenesis of pathological lesions. *J. Neuropathol. & Exptl. Neurol.* 4: 269-276, 1945.
- * Reeves, W. C.; Sturgeon, J. M.; French, E. M.; and Brookman, B.
Transovarian transmission of neutralizing substances to western equine and St. Louis encephalitis viruses by avian hosts. *J. Infectious Diseases.* 95: 168-178, 1954.
- Relinger, P.; and Bailly, J.
Transmission du virus de l'encephalomyelitis des equides a la cigogne. *Compte. rend. soc. biol.* 122: 518-519, 1936.
- Remlinger, P.; and Bailly, J.
Transmission de l'encephalomyelitis des equides (virus californien) au vautour fauve (*Vultur fulvis* Brius). *Compt. rend. soc. biol.* 123: 562-563, 1936.
- * Sabin, A. B.; and Olitsky, P. K.
Variations in pathways by which encephalomyelitic viruses invade CMS of mice and guinea-pigs. *Proc. Soc. Exptl. Biol. Med.* 38: 595-597, 1938.
- * Schlesinger, R. W.; Olitsky, P. K.; and Morgan, I. M.
Induced resistance of central nervous system to experimental infection with equine encephalomyelitis virus abortive infection with western virus and subsequent interference with action of heterologous viruses. *J. Exptl. Med.* 80: 197-211, 1944.
- * Schlotthauer, C. F.
Susceptibility of dogs to virus of equine encephalomyelitis (western). *J. Amer. Vet. Med. Assoc.* 99: 388-390, 1941.

X. MAMMALS & AVIAN HOSTS: EXPERIMENTAL STUDIES

- * Schlotthauer, C. F.
Susceptibility of guinea-pigs to equine encephalomyelitis virus inoculated through various routes. J. Amer. Vet. Med. Assoc. 96: 490-492, 1940.
- Schoening, H. W.
The epizootology of infectious equine encephalomyelitis in the United States. Vet. Bull. 34: 13-19, 1940.
- * Shahan, M. S.; and Creech, G. T.
Note on susceptibility of golden hamster (*Cricetus auratus*) to the virus of equine encephalomyelitis. Amer. J. Vet. Research. 3: 193-194, 1942.
- Shinefield, H. R.; and Townsend, T. E.
Transplacental transmission of western equine encephalomyelitis. J. Pediat. 43: 21-25, 1953. Bull. Hyg. 29: 139, 1954.
- * Sooter, C. A.; Howitt, B. F.; and Gorrie, R.
Encephalitis in midwest. IX. Neutralizing antibodies in wild birds of midwestern States. Proc. Soc. Exptl. Biol. Med. 79: 507-509, 1953.
- * Sooter, C. A.; Howitt, B. F.; Gorrie, R.; and Cockburn, T. A.
Encephalitis in the Midwest. IV. Western equine encephalomyelitis virus recovered from nestling wild birds in nature. Proc. Soc. Exptl. Biol. Med. 77: 393-394, 1951. Biol. Abstr. #1950 (1952).
- * Sulzberg, S. E.; Goth, A.; and Zarafonetis, C.
Influence of anesthesia on experimental western equine encephalomyelitis. Science. 104: 53-54, 1946.
- * Syverton, J. T.; and Berry, G. P.
Host range of equine encephalomyelitis: susceptibility of the North American cottontail rabbit, jack rabbit, field vole, wood-chuck and opossum to experimental infection. Amer. J. Hyg. 32(B): 19-23, 1940.
- * Syverton, J. T.; and Berry, G. P.
Susceptibility of the gopher (*Citellus richardsonii*) (Sabine) to equine encephalomyelitis. Proc. Soc. Exptl. Biol. Med. 34: 822-824, 1936.
- Traub, E.
Experimental studies on an American strain of equine encephalomyelitis virus changed by passage through pigeon. Zentr. Bakt. Abt. 1: 143: 7-22, 1938. Biol. Abstr. #6172, 1939.
- * Watson, W. D.; and Smadel, J. E.
Susceptibility of hamsters to peripheral inoculation of western, eastern and West Nile encephalitis viruses. Proc. Soc. Exptl. Biol. Med. 52: 101-104, 1943.
- * Wyckoff, R. W. G.
Encephalomyelitis in monkeys. Science. 84: 542-543, 1939.
- * Zlonis, J.; and Shaughnessy, H. J.
Successful treatment of experimental western encephalomyelitis with hyperimmune rabbit serum. Amer. J. Public Health. 35: 815-823, 1945.

XI. ARTHROPOD VECTORS: EXPERIMENTAL STUDIES

- * Abdel-Malek, A.
The biology of Aedes trivittatus.
J. Econ. Entomol. 41: 951-954,
1948.
- * Burgdorfer, W.; and Pickens, E. G.
Technique employing embryonated
chickens eggs for the infection
of argasid ticks with Coxiella
burnetii, Bacterium tularense,
Leptospira icterohaemorrhagiae,
and western equine encephalitis
virus. J. Infectious Diseases.
94: 84-89, 1954.
Excerpta Med. (IV) #1019 (1955).
- * Bang, F. B.; and Reeves, W. C.
Mosquitoes and encephalitis in
Yakima Valley, Washington; feed-
ing habits of Culex tarsalis Coquil-
lett, mosquito host of virus of
western equine encephalitis. J.
Infectious Diseases. 70: 273-274,
1942.
- Bishopp, F. C.
Mosquito transmission of
encephalomyelitis, or brain
fever, of horses. J. Wash.
Acad. Sci. 29: 495-501, 1939.
- * Blackmore, J. S.; and Wian, J. F.
Mosquito naturally infected with
Western equine encephalomyelitis
virus. Proc. Soc. Exptl. Biol.
Med. 87: 328-329, 1954.
Bull. Hyg. 30: 288, 1955.
- * Brockman, E.
Relation of arthropods to the
epidemiology of virus encephalitis
in Kern County, California. JDI
Bull. 7: 7- , 1950.
- * Burgdorfer, W.; and Pickens, E. G.
A technique employing embryo-
nated chicken eggs for the in-
fection of Argasid ticks with
Coxiella burnetii, Bacterium tula-
rense...and western encephalitis
virus. J. Infectious Diseases.
94: 84-89, 1954.
- * Burroughs, A. L.; and Burroughs,
R. N.
Study of the ecology of West-
ern equine encephalomyelitis
virus in the Upper Mississippi
River Valley. Amer. J. Hyg.
60: 27-36, 1955.
Vet. Bull. #95 (1955).
- * Chamberlain, Roy W.; Corrigan,
E. C.; and Sikes, R. K.
Studies on the North American
arthropod-borne encephalitides.
v. The extrinsic incubation of
eastern and western equine
encephalitis in mosquitoes.
Amer. J. Hyg. 60: 269-277,
1954.
- * Chamberlain, R. W.; and Sikes,
R. K.
Laboratory rearing methods for
three common species of bird
mites. J. Parasitol. 36: 461-
465, 1950.
- * Chamberlain, R. W.; and Sikes,
R. K.
A safe method of handling
mosquitoes for virus trans-
mission experiments. J.
Parasitol. 36: 494-500, 1950.
- Davis, William A.
Experiments on the role of
birds and mosquitoes on the
epidemiology of equine encephalo-
myelitis. J. Bact. 39: 42,
1944. (Abstract)

XI. ARTHROPOD VECTORS: EXPERIMENTAL STUDIES

- * Ferguson, E. F.
Biological factors in the transmission of arthropod-borne virus encephalitides. (Bibliography 1930-1951). Public Health Monog. #23 (1954).

- Find encephalitis virus in birds, insects. J. Amer. Vet. Med. Assoc. 113: 464, 1948.

- * Grundmann, A. W.; Kitselman, C. M.; Rhoderick, L. M.; and Smith, R. C.
Studies on the transmission of the western virus of equine encephalomyelitis by the American dog tick, Dermacentor variabilis Say and by Triatoma sanguisuga (Le Conte). J. Infectious Diseases. 72: 163-171, 1943.

- Gwatkin, Ronald.
On the susceptibility of ground squirrels to the virus of equine encephalomyelitis and ticks as possible vectors. Can. J. Comp. Med. 3: 131-133, 1939.

- * Hammon, W. M.
The arthropod-borne virus encephalitides. Amer. J. Trop. Med. 28: 515-525, 1948.

- * Hammon, W. M. and Espana, C.
Simple method of producing control guinea-pig immune sera for use with complement fixing antigens for arthropod-borne virus encephalitides. Proc. Soc. Exptl. Biol. Med. 55: 113-115, 1947.

- * Hammon, W. M. and Reeves, W. C.
Inter-epidemic studies on arthropod-borne virus encephalitides and poliomyelitis in Kern County, California and the Yakima Valley, Washington, 1944. Amer. J. Hyg. 46: 326-335, 1947.

- * Hammon, W. M.; and Reeves, W. C.
Recent advances in epidemiology of arthropod-borne virus encephalitides including certain exotic types. Amer. J. Public Health. 35: 994-1004, 1945.

- * Hammon, W. M.; and Reeves, W. C.
Western equine encephalitis control studies in Kern County, California, 1945; evaluation of effectiveness of certain types of mosquito control including residual DDT on virus infection rates in culex mosquitoes and in chickens. Amer. J. Hyg. 47: 93-102, 1948.

- * Hammon, W. M.; Reeves, W. C.; Brookman, B.; and Gjullin, C.
Mosquitoes and encephalitis in the Yakima Valley, Washington. V. Summary of the case against Culex tarsalis Coquillett as a vector of the St. Louis and western equine viruses. J. Infectious Diseases. 70: 278-283, 1942.

- * Hammon, W. M.; Reeves, W. C.; Brookman, B.; and Izumi, E. M.
Mosquitoes and encephalitis in the Yakima Valley, Washington. I. Arthropods tested and recovery of western equine and St. Louis viruses from Culex tarsalis Coquillett. J. Infectious Diseases. 70: 263-266, 1942.

- * Hammon, W. M.; Reeves, W. C.; Brookman, B.; Izumi, E. M.; and Gjullin, C.
Isolation of the viruses of western equine and St. Louis encephalitis from Culex tarsalis mosquitoes. Science. 94: 328-330, 1941.

XI. ARTHROPOD VECTORS: EXPERIMENTAL STUDIES

- * Hammon, W. M.; Reeves, W. C.; Burroughs, R. N.; and Huelskamp, M.
Western equine encephalitis control studies in Kern County, California, 1945. II. An evaluation of the effectiveness of certain types of control including residual DDT on virus infection rate in *Culex* mosquitoes and in chickens. *Amer. J. Hyg.* 47: 93-102, 1948.
- * Hammon, W. M.; Reeves, W. C.; Cunha, R.; Espana, C.; and Sather, G.
Isolation from wild bird mites (*Liponyssus sylvianus*) of a virus or mixture of viruses from which St. Louis and western equine encephalitis viruses have been obtained. *Science*. 107: 92-93, 1948.
- * Hammon, W. M., Reeves, W. C., and Gray, M.
Mosquito vectors and inapparent animal reservoirs of St. Louis and western equine encephalitis viruses. *Amer. J. Public Health*. 33: 201-207, 1943.
- Hammon, W. M., Reeves, W. C., and Irons, J. V.
Survey of the arthropod-borne encephalitides in Texas with particular reference to the lower Rio Grande Valley in 1942. *Texas Rep. Biol. Med.* 2: 356-375, 1944.
- * Hammon, W. M., Reeves, W. C., and Izumi, E. I.
Mosquitoes and encephalitis in the Yakima Valley, Washington. II. Methods for collecting arthropods and for isolating western equine and St. Louis viruses. *J. Infectious Diseases*. 70: 267-272, 1942.
- Henderson, J. L.
Arthropod-borne encephalitides of North America. New Orleans *Med. Surg. J.* 97: 22-29, 1944.
- Herns, W. B.; Wheeler, C. M.; and Herns, H. P.
Attempts to transmit equine encephalomyelitis by means of blood-sucking insects, especially mosquitoes. *J. Econ. Entomol.* 27: 987-998, 1934.
- * Jenkins, D. W.
Bionomics of *Culex tarsalis* in relation to western equine encephalomyelitis. *Amer. J. Trop. Med.* 30: 909-916, 1950.
- * Kelser, R. A.
Methods of exposing experimental animals to virus infection through mosquito vectors. *Amer. J. Public Health*. 30: 866-870, 1940.
- Kelser, R. A.
Mosquitoes as vectors of the virus of equine encephalomyelitis. *J. Amer. Vet. Med. Assoc.* 82: 767-771, 1933.
- * Kelser, R. A.
Transmission of the virus of equine encephalomyelitis by *Aedes triseriatus*. *Science*. 85: 178, 1937.
- * Also *J. Amer. Vet. Med. Assoc.* 92: 195-203, 1938.
- Kitselman, C. H., and Grundman, A. W.
Equine encephalomyelitis virus isolated from naturally infected *Triatoma sanguisuga* Le Conte. *Kansas Agric. Exptl. Sta. Tech. Bull.* #50: 1-15, 1940.

XI. ARTHROPOD VECTORS; EXPERIMENTAL STUDIES

Knowlton, G. F.

Insect transmission of equine encephalomyelitis studies. Utah Agric. Exptl. Sta. Bull. #250: 47, 1934.

Knowlton, G. F.; and Rowe, J. A.

Handling mosquitoes on equine encephalomyelitis investigation. J. Econ. Entomol. 28: 824-829, 1935.

Lytle, W.H.

Encephalomyelitis (California horse disease) spread by mosquitoes. Oregon Dept. Agric. Bull. #18: 19-20, 1933.

* McIntock, J.

Collecting and handling mosquitoes on western equine encephalitis investigations in Manitoba. Can. J. Research (E) 24: 55-62, 1946.

Madsen, D. E.; and Knowlton, G. F.

Mosquito transmission of equine encephalomyelitis. J. Amer. Vet. Med. Assoc. 86: 662-666, 1935.

Madsen, D. E.; Knowlton, G. F.; and Rowe, J. A.

Further studies on transmission of equine encephalomyelitis by mosquitoes. J. Amer. Vet. Med. Assoc. 89: 187-196, 1936.

Manzelli, M. A.

A survey of the arthropod vectors of equine encephalomyelitis and encephalitis. J. New York Entomol. Soc. 56: 79-107, 1948.

Merrill, Malcolm H.

The mosquitoes as a possible vector of equine encephalomyelitis. Proc. Calif. Mosquito Control Assoc. 11: 22-31, 1940.

* Merrill, M. H.; and TenBreeck, C.

Transmission of equine encephalomyelitis virus by Aedes aegypti. J. Exptl. Med. 62: 687-695, 1935.

* Merrill, M. H.; Lacaille, C. W., Jr.; and TenBreeck, C.

Mosquito transmission of equine encephalomyelitis. Science. 80: 251-252, 1934.

* Miles, J. A. R.; and Howes, D. W.

An encephalitis virus isolated in south Australia. II. Serological observations on the virus and its relation to other arthropod-borne encephalitis. Australian J. Exptl. Biol. Med. Sci. 30: 295-300, 1952.

* Miles, V. I.; Howitt, B. F.; Gorrie, R.; and Cockburn, T. A.

Encephalitis in the Midwest. V. Western equine encephalomyelitis viruses recovered from mites, Dermanyssus americanus Ewing. Proc. Soc. Exptl. Biol. Med. 77: 395-396, 1951.

* Norris, Marjorie.

Recovery of a strain of western equine encephalitis virus from Culex restuans (Theob.) (Diptera: Culicidae). Can. J. Research (E) 24: 63-70, 1946.

* Phillips, C. B.; and Cox, Harold R.

Equine encephalomyelitis in western Montana in 1936: a brief discussion of the implications of arthropod transmission. J. Parasitol. 22: 542, 1936.

XI. ARTHROPOD VECTORS; EXPERIMENTAL STUDIES

Reeves, W. C.

Newer developments in knowledge of insect hosts and vectors of western equine and St. Louis encephalitis. Proc. Calif. Mosquito Control Assoc., 12th Annual Conference, p. 23-30, 1941.

Reeves, W. C.

The present status of knowledge of mosquito ecology in California. Proc. Calif. Mosquito Control Assoc., 18th Annual Conference, p. 59-61, 1950.

* Reeves, W. C.; and Galindo, P.

Epizootology of western equine type encephalomyelitis eastern Nebraska field survey of 1943 with isolation of virus from mosquitoes. Amer. J. Vet. Research. 6: 145-148, 1945.

* Reeves, W. C.; and Hammon, W. M.

Feeding habits of the proven and possible mosquito vectors of western equine and St. Louis encephalitis in the Yakima Valley Washington. Amer. J. Trop. Med. 24: 131-134, 1944.

* Reeves, W. C.; Hammon, W. M.; Doetschmann, W. H.; McClure, H. E. and Sothel, G.

Studies on mites as vectors of Western equine and St. Louis encephalitis viruses in California. Amer. J. Trop. Med. Hyg. 4: 90-105, 1955.

* Reeves, W. C.; Hammon, W. M.; Furman, D. P.; McClure, H. E. and Brookman, B.

Recovery of western equine encephalomyelitis virus from wild bird mites (*Liponyssus sylvestris*) in Kern County, California. Science, 105: 411-412, 1947.

* Reeves, W. C.; and Izumi, E. M.

Mosquitoes and encephalitis in Yakima Valley, Washington; methods for collecting arthropods and for isolating western equine and St. Louis viruses. J. Infectious Diseases. 70: 267-272, 1942.

* Reeves, W. C.; Washburn, G. E.; and Hammon, W. M.

Western equine encephalitis control studies in Kern County, California, 1945. I. The effectiveness of residual DDT deposits on adult *Culex* mosquito populations. Amer. J. Hyg. 47: 82-92, 1948.

* Rempel, J. G.; Riddell, W. A.; and McNelly, E. M.

Multiple feeding habits of Saskatchewan mosquitoes. Can. J. Research (E) 24: 71-78, 1946.

* Schaeffer, M.; Arnold, E. H.;

Kissling, R. E.; Chamberlain, R. W.; Eidson, M. E.; Sikes, R. K.; Bucca, M. A.; Vanella, J. M.; Corristan, E. G.; Nelson, D. B.; and Sudia, W. D.

Studies on North American arthropod-borne encephalitides. I-VII. Amer. J. Hyg. 60: 231-291, 1954.

* Scrivani, R. P.; Reeves, W. C.; and Brookman, B.

Purification of activity of western equine encephalitis neutralizing antibodies to *Aedes nigromaculis* and *Culex tarsalis*. Amer. J. Trop. Med. Hyg. 2: 457-463, 1953.
Biol. Abstr. #27952 (1953).

XI. ARTHROPOD VECTORS; EXPERIMENTAL STUDIES

- * Simmons, J. S.; Reynolds, F. H. K.; and Cornell, V. H.
Transmission of virus of equine encephalomyelitis through *Aedes albopictus* Skuze. *Amer. J. Trop. Med.* 16: 289-302, 1936.
- * Sulkin, S. E.
Recovery of equine encephalomyelitis virus (western type) from chicken mites. *Science*. 101: 381-383, 1945.
- * Sulkin, S. E.; and Izumi, E. M.
Isolation of western equine encephalomyelitis virus from tropical fowl mites *Liponyssus bursa* (Berlese). *Proc. Soc. Exptl. Biol. Med.* 66: 249-250, 1947.
- * Sulkin, S.; Wisseman, Charles L., Jr.; Izumi, Ernest; and Zarafonetis, Christine.
Mites as possible vectors or reservoirs of equine encephalitis in Texas. *Amer. J. Trop. Med. Hyg.* 4: 119-134, 1955.
- * Sylverton, J. T.; and Berry, G. P.
An arthropod vector for equine encephalomyelitis, Western serum. *Science*. 84: 186-187, 1936.
- Sylverton, J. T.; and Berry, G. P.
Heredity transmission of western type equine encephalomyelitis virus in wood tick, *Dermacentor andersoni* Stiles. *J. Exptl. Med.* 73: 507-530, 1941.
- Sylverton, J. T.; and Berry, G. P.
The tick as a vector for the virus disease, equine encephalomyelitis. *J. Bact.* 33: 60, 1937.
- * TenBroeck, G.; and Merrill, M. H.
Transmission of equine encephalomyelitis by *Aedes aegypti*. *Arch. Pathol.* 20: 164, 1935.
- * Thompson, G. A.; Howitt, Beatrice; Gorrie, R.; and Cockburn, T. A.
Encephalitis in midwest. VI. Western equine encephalomyelitis virus isolated from *Aedes dorsalis* Meigen. *Proc. Soc. Exptl. Biol. Med.* 78: 289-290, 1951.
- Thurman, D. C., Jr.
Ecology of *Aedes* mosquitoes in California. *Proc. Calif. Mosquito Control Assoc.*, 18th Annual Conference, p. 62-65, 1950.
- * Trager, W.
Multiplication of the virus of equine encephalomyelitis in surviving mosquito tissues. *Amer. J. Trop. Med.* 18: 387-393, 1938.

XII. EPIDEMIOLOGY

GENERAL EPIDEMIOLOGY

Buttitta, P. L.; and Basilico, Y.
Further epidemiological and serological research on Western equine encephalitis. *Boll. soc. ital. biol. sper.* 28(7): 1534-1535, 1952.

Fothergill, LeRoy D.

A tentative classification of virus diseases of the central nervous system, with a consideration of certain epidemic types of encephalitis. *Harvard Univ. Symposium on Virus and Rickettsial Diseases.* Cambridge, Mass. Harvard Univ. Press. p. 617-641, 1940.

- * Infectious equine encephalomyelitis in the United States in 1939. *Public Health Repts.* 55: 601-602, 1940.

- * Shahan, M. S.; and Giltner, L. T.
A review of the epizootology of equine encephalomyelitis in the United States. *J. Amer. Vet. Med. Assoc.* 107: 279-288, 1945.

- * Syverton, J. T.

Discussion on epidemiology of equine encephalomyelitis. *Proc. Intern. Congr. Microbiol.* 3rd Annual Rept. p. 306-307, 1940.

- * Transmission of virus encephalitis. *Public Health Repts.* 69: 1095-1096, 1954.

LABORATORY INFECTIONS

Biester, H. E.; and Schwarte, L. H.
Laboratory case studies of equine encephalomyelitis. *Iowa Vet.* 7: 13-17, 1936.

- * Fothergill, LeRoy D.; Holden, M.; and Wyckoff, R.

Western equine encephalomyelitis in a laboratory worker. *J. Amer. Med. Assoc.* 113: 206-207, 1939.

- * Gold, H.; and Hampil, B.

Equine encephalomyelitis in a laboratory technician with recovery. *Ann. Internal Med.* 16: 556-569, 1942.

- * Hammon, W. M.; and Reeves, W. C.

Laboratory transmission of western equine encephalomyelitis virus by mosquitoes of the genera *Culex* and *Culiseta*. *J. Exptl. Med.* 78: 425-434, 1943.

- * Helwig, F. C.

Western equine encephalomyelitis following accidental inoculation with chick embryo virus; report of fatal human case with necropsy. *J. Amer. Med. Assoc.* 115: 291-292, 1940.

- * Olitsky, P. K.; and Morgan, I. M.

Protective antibodies against equine encephalomyelitis virus in serum of laboratory workers. *Proc. Soc. Exptl. Biol. Med.* 41: 212-215, 1939.

Roberts, S. J.; and Moore, G. R.

Report on equine enzootic encephalomyelitis at the Kansas State Veterinary College Clinic. *Cornell Vet.* 29: 270-278, 1939.

EPIDEMIC COUNTRIES

CANADA

- * Davison, R. O.
Encephalomyelitis in Saskatchewan, 1941. Can. J. Public Health. 33: 388-398, 1942.
- * Donovan, C. R.; and Bowman, M.
Epidemiology of encephalomyelitis, western type, Manitoba, 1941. Can. Med. Assoc. J. 46: 525-530, 1942.
- * Donovan, C. R.; and Bowman, M.
Some epidemiological features of poliomyelitis and encephalitis, Manitoba, 1941. Can. J. Public Health. 33: 246-257, 1942.
- Fulton, J. S.
Epidemic encephalitis of man and equines in Saskatchewan. Proc. Intern. Vet. Congr. Stockholm, 15th Annual Rept. 1(Pt. 1): 295-299, 1953.
Vet. Bull. 24(5): 246, 1954.
- * Fulton, J. S.
Relation of equine encephalomyelitis to the epidemic of the human encephalitis in Saskatchewan in 1938. Can. J. Public Health. 32: 6-12, 1941.
- Fulton, J. S.
A report of two outbreaks of equine encephalomyelitis in Saskatchewan. Can. J. Comp. Med. 2: 39-46, 1938.
- * Fulton, J. S.; and Burton, A. N.
Human encephalitis in Saskatchewan caused by the virus of Western equine encephalomyelitis. Can. J. Public Health. 43: 212-220, 1952.
- * Gareau, U. J.
Clinical aspects of epidemic of human encephalomyelitis in Saskatchewan in 1947. Can. J. Public Health. 33: 1-5, 1941.
- Gareau, U. J.
Human encephalomyelitis in Saskatchewan in 1947. Pediatrics. 3: 777-782, 1949.
- Gareau, U. J.
Human equine encephalomyelitis in Saskatchewan. Amer. J. Diseases Children. 79: 942-943, 1950.
- * Jackson, F. W.
Encephalitis (western equine) in Manitoba, 1941. Amer. J. Public Health. 33: 833-838, 1943.
- * McGugan, A. C.
Equine encephalomyelitis: (western type) in humans in Alberta, 1941. Can. J. Public Health. 33: 148-151, 1942.
- McLintock, J.
Infection cycles in western equine and St. Louis encephalitis. Manitoba Med. Rev. 27: 635-637, 1947.
- * Mitchell, C. A. and Pullin, J. W.
Examination of sera from persons in Manitoba, Ontario and Quebec for neutralizing antibodies (western type) of encephalomyelitis. Can. J. Public Health. 34: 419-420, 1943.
- * Savage, A.
Note on prevalence of encephalomyelitis in Manitoba horses prior to 1941. Can. Public Health J. 33: 258, 1942.

EPIDEMIC COUNTRIES

UNITED STATES

- Aitken, T. H. G.
The relationship of the distribution of cases of equine encephalomyelitis (human and equine) and mosquitoes in California. Proc. Congr. Mosquito Control Assoc., 11th Annual Rept. p. 8-15, 1940.
- * Biester, H. E.; and Schwarte, L. H.
Studies on equine encephalomyelitis in Iowa during 1939. J. Amer. Vet. Med. Assoc. 96: 719-723, 1939.
- * Breslick, P. J.; Rowe, P. H.; and Lehman, W. L.
Epidemic encephalitis in North Dakota. J. Amer. Med. Assoc. 113: 1722-1724, 1939.
- * Brown, G. C.
Studies on equine encephalomyelitis in Michigan. J. Infectious Diseases. 81: 48-54, 1947.
- Brueckner, A. L.; Poelma, L.; Everson, C. L.; and Reed, R. C.
Equine encephalomyelitis. Maryland Agric. Exptl. Sta. Bull. #369: 137-146, 1934.
- * Burroughs, A. L.; and Burroughs, R. N.
A study of the ecology of Western equine encephalomyelitis virus in the Upper Mississippi river valley. Amer. J. Hyg. 60: 27-36, 1954.
Vet. Bull. #95 (1955).
- * Buss, W. C.; and Howitt, B. F.
Human equine encephalomyelitis on Kern County, California, 1938-1939 and 1940. Amer. J. Public Health. 31: 935-944, 1941.
Biol. Abstr. #25486 (1952).
- * Cockburn, T. A.; Price, E. R.; and Rowe, J. A.
Virus encephalitis in the Missouri River Basin. Public Health Repts. 65: 1690, 1950.
* Also: CDC Bull. 9: 13-24, 1950.
- * Cover, M. S.
Human and equine encephalitis in Kansas. J. Amer. Vet. Med. Assoc. 103: 300, 1943.
(Abstract)
- * Cox, H. R.; and Philip, C. B.
Observations incident to an outbreak of equine encephalomyelitis in the Bitterroot Valley of western Montana. J. Amer. Vet. Med. Assoc. 93: 225-232, 1938.
- * Eklund, C. M.
Human encephalitis of the western equine type in Minnesota in 1941; clinical and epidemiological study of serologically positive cases. Amer. J. Hyg. 43: 171-193, 1946.
- Giltner, L. T., and Shahan, M. S.
The present status of infectious equine encephalomyelitis in the United States. J. Amer. Vet. Med. Assoc. 88: 363-374, 1936.
- * Gordon, J. E.
Infection of man with virus of equine encephalomyelitis. Amer. J. Med. Sci. 198: 437-444, 1939.
- Hammon, W. M.
Animal reservoirs, general epidemiological summary, and possible control measures for the American summer encephalitis. Proc. Calif. Mosquito Control Assoc., 12th Annual Conf. p. 37-51, 1941.

EPIDEMIC COUNTRIES

UNITED STATES

- * Hammon, W. M.
Encephalitis: Eastern and Western equine and St. Louis types, as observed in 1941, in Washington, Arizona, New Mexico, and Texas. J. Amer. Med. Assoc. 121: 560-566, 1943.
- * Hammon, W. M.
Encephalitis in Yakima Valley; mixed St. Louis and Western equine types. J. Amer. Med. Assoc. 117: 161-167, 1941. (Correction 117: 802, 1941)
- Hammon, W. M.
Encephalitides of virus origin with special reference to those of North America. Clinics. 4: 485-503, 1945.
- * Hammon, W. M.
Epidemic encephalitis of North America. Med. Clin. N. Amer. 27: 632-650, 1948.
- * Hammon, W. M.; and Howitt, B. F.
Epidemiological aspects of encephalitis in the Yakima Valley: mixed St. Louis and Western equine types. Amer. J. Hyg. 35: 163-185, 1942.
- * Hammon, W. M.; and Reeves, W. C.
Western equine encephalitis control studies in Kern County, California, 1945: evaluation of effectiveness of certain types of mosquito control including residual DDT on virus infection rates in culex mosquitoes and in chickens. Amer. J. Hyg. 47: 93-102, 1948.
- * Hammon, W. M.; Reeves, W. C.; Benner, S. F.; and Brookman, B.
Human encephalitis in the Yakima Valley, Washington, 1942, with 49 virus isolations (western equine and St. Louis types) from mosquitoes. J. Amer. Med. Assoc. 128: 1133-1139, 1945.
- * Hammon, W. M.; Reeves, W. C.; Brookman, B.; and Gjullin, C.
Mosquitoes and encephalitis in the Yakima Valley, Washington: V. Summary of the case against Culex tarsalis Coquillett as a vector of the St. Louis and western equine viruses. J. Infectious Diseases. 70: 278-283, 1942.
- * Hammon, W. M.; Reeves, W. C.; Brookman, B.; and Izumi, E. M.
Mosquitoes and encephalitis in the Yakima Valley, Washington. I. Arthropods tested and recovery of western equine and St. Louis viruses from Culex tarsalis Coquillette. J. Infectious Diseases. 70: 263-266, 1942.
- * Hammon, W. M.; Reeves, W. C.; and Galindo, P.
Epidemiologic studies of encephalitis in the San Joaquin Valley, California, 1943, with the isolation of viruses from mosquitoes. Amer. J. Hyg. 42: 299-306, 1945.

EPIDEMIC COUNTRIES

UNITED STATES

- * Hammon, W. M.; Reeves, W. C.; and Galindo, P.
Epidiziology of western equine type encephalomyelitis; Eastern Nebraska field survey of 1943 with isolation of the virus from mosquitoes. Amer. J. Vet. Research. 6: 145-148, 1945.
- * Hammon, W. M.; Reeves, W. C.; and Izumi, E. M.
Mosquitoes and encephalitis in the Yakuma Valley, Washington. II. Methods for collecting arthropods and for isolating western equine and St. Louis viruses. J. Infectious Diseases. 70: 267-272, 1942.
- Howitt, B. F.
Equine encephalomyelitis: its relationship to man in California. Calif. & Western Med. 51: 1-7, 1939.
- * Howitt, B. F.
Viruses of equine and St. Louis encephalitis in relationship to human infections in California, 1937-1938. Amer. J. Public Health. 29: 1083-1097, 1939.
- * Leake, J. P.
Epidemic of infectious encephalitis. Public Health Repts. 56: 1902-1905, 1941.
- * Miles, V. I.; Howitt, B. F.; Gorrie R.; and Cockburn, T. A.
Encephalitis in the Midwest. V. Western equine encephalomyelitis viruses recovered from mites, Dermanyssus americanus Ewing. Proc. Soc. Exptl. Biol. Med. 77: 395-396, 1951.
Biol. Abstr. #1553 (1952).
- Miller, A. W.
Report on infectious equine encephalomyelitis in the United States in 1943. Washington, D. C., U. S. Bur. Animal Industry, 1944.
- Miller, A. W.
Report on infectious equine encephalomyelitis in the United States in 1944. Washington, D. C., U. S. Bur. Animal Industry, 1945.
- * Also: J. Amer. Vet. Med. Assoc. 107: 10-13, 1945.
- Mohler, J. R.
Report on outbreaks of infectious equine encephalomyelitis in the United States, 1935-1937. Washington, D. C., U. S. Bur. Animal Industry, 1938.
- Mohler, J. R.
Report on the 1938 outbreak of infectious equine encephalomyelitis in the United States. Washington, D. C., U. S. Bur. Animal Industry, 1939.
- Mohler, J. R.
Report on infectious equine encephalomyelitis in the United States in 1939. Washington, D. C., U. S. Bur. Animal Industry, 1940.
- Mohler, J. R.
Report on infectious equine encephalomyelitis in the United States in 1940. Washington, D. C., U. S. Bur. Animal Industry, 1941.

EPIDEMIC COUNTRIES

UNITED STATES

Mohler, J. R.

Report on infectious equine encephalomyelitis in the United States in 1941. Washington, D. C., U. S. Bur. Animal Industry, 1942.

Mohler, J. R.

Report on infectious equine encephalomyelitis in the United States in 1942. Washington, D. C., U. S. Bur. Animal Industry, 1943.

- * Phillip, C. B.; and Cox, Harold R.
Equine encephalomyelitis in western Montana in 1936; a brief discussion of the implications of arthropod transmission. *Parasitol.* 22: 542, 1936. (Abstract)

Records, E.

Equine encephalomyelitis in Nevada. *J. Amer. Vet. Med. Assoc.* 80: 509, 1932.

Records, E.

Report of committee on miscellaneous transmissible diseases. Encephalomyelitis of equines. *J. Amer. Vet. Med. Assoc.* 80: 509-511, 1932.

Records, E.; and Vawter, L. R.

Equine encephalomyelitis. Nevada Agric. Exptl. Sta. Bull. #132, 1933.

- * Reeves, W.C.

Encephalitis: epidemic potential suggested. *Public Health Repts.* 65: 1690, 1950.

- * Reeves, William C.

The encephalitis problem in the United States. *Amer. J. Public Health.* 41: 678-686, 1951.

- * Reeves, W. C.; Hammon, W. M.; Doetschman, W. H.; McClure, H. E.; and Sother, G.

Studies on mites as vectors of western equine and St. Louis encephalitis viruses in California. *Amer. J. Trop. Hyg.* 4(1): 90-105, 1955.

- * Reeves, W. C.; Hammon, W. M.; Lazarus, A. S.; Brookman, B.; McClure, H. E.; and Doetschman, W. H.

Changing picture of encephalitis in the Yakima Valley, Washington. *J. Infectious Diseases.* 90: 291-301, 1952.

- * Reeves, W. C.; and Izumi, E. M.

Mosquitoes and encephalitis in Yakima Valley, Washington; methods for collecting arthropods and for isolating western equine and St. Louis viruses. *J. Infectious Diseases.* 70: 267-272, 1942.

- * Reeves, W. C.; Mack, W. N.; and Hammon, W. H.

Epidemiological studies on western equine encephalomyelitis and St. Louis encephalitis in Oklahoma, 1944. *J. Infectious Diseases.* 81: 191-196, 1947.

Schoening, H. W.; Giltner, L. T.; and Shahan, M. S.

Equine encephalomyelitis with specific reference to the 1937 outbreak. *Iowa Vet.* 9: 5-17, 1938.

EPIDEMIC COUNTRIES

UNITED STATES

Shahan, M.S.; Giltner, L. T.;
and Shoening, H. W.

A review of the 1938 outbreak
of infectious equine encephalo-
myelitis in the United States.
Proc. U. S. live Stk. Sanit.
Assoc., 42nd Annual Meeting.
p. 145-157, 1938.

Simms, B. T.

Report on infectious equine
encephalomyelitis in the United
States in 1945. Washington, D. C.,
U. S. Bur. Animal Industry, 1946.

* Also: J. Amer. Vet. Med. Assoc.
109: 191-193, 1946.

Simms, B. T.

Report on infectious equine
encephalomyelitis in the United
States in 1946. Washington, D. C.,
U. S. Bur. Animal Industry, 1947.

Simms, B. T.

Report on infectious equine
encephalomyelitis in the United
States in 1947. Washington, D. C.,
U. S. Bur. Animal Industry, 1948.

Simms, B. T.

Report on infectious equine
encephalomyelitis in the United
States in 1948. Washington, D. C.,
U. S. Bur. Animal Industry, 1949.

Simms, B. T.

Report on infectious equine
encephalomyelitis in the United
States in 1949. Washington, D. C.,
U. S. Bur. Animal Industry, 1950.

* Also: J. Amer. Vet. Med. Assoc.
117: 210-211, 1950.

Simms, B. T.

Report on infectious equine
encephalomyelitis in the United
States in 1950. Washington, D. C.,
U. S. Animal Industry, 1951.

* Also: J. Amer. Vet. Med. Assoc.
119: 110-111, 1951.
Biol. Abstr. #9279 (1952).

Simms, B. T.

Report on infectious equine
encephalomyelitis in the United
States in 1953. Animal Disease
& Parasite Res. Branch U. S.
Govt., 1954.

* Sulkin, S. Edward; Wisseman,
Charles L., Jr.; Izumi, Ernest
M.; Zarafonitis, Christine.

Mites as possible vectors
or reservoirs of equine
encephalomyelitis in Texas.
Amer. J. Trop. Med. Hyg.
4: 119-134, 1955.

Van Wagenen, R. J.

Equine encephalitis in the
San Joaquin Valley, California.
Calif. Western Med. 54: 264-
267, 1941.

* Vawter, L. R., and Records, E.
Respiratory infection in
equine encephalomyelitis.
Science. 78: 41-42, 1933.

* Wenner, H. A.; Kamitsuka, P.;
Kramer, M. C.; Cockburn, T. A.;
and Price, E. R.

Encephalitis in the Missouri
River Basin. II. Studies on a
focal outbreak of encephalitis
in North Dakota. Public Health
Repts. 66: 1075-1085, 1951.
Biol. Abstr. #31632 (1952).

EPIDEMIC COUNTRIES

UNITED STATES

- * Wheeler, J. A.
Western equine encephalitis occurring among human beings in Kansas during summer of 1941; preliminary report. J. Amer. Med. Assoc. 117: 1972-1973, 1941.
- * Wynns, H. L.; and Hawley, C. J.
Epidemiology of epidemic encephalitis in California. Amer. J. Public Health. 29: 781-786, 1939.

MISCELLANEOUS COUNTRIES

- Alice, F. J.
Equine infectious encephalomyelitis in Brazil. Proc. Vth Congr. bras. Vet. Sao Paulo, 1950. p. 585-608, 1951.
Vet. Bull. #2826 (1953).
- * Reeves, W. C.
Epidemiology of the arthropod virus encephalitis. A Pan-American problem. Bol. ofic. sanit. pan-ameri. 27: 347-355, 1948.
- Remlinger, P.; and Bailey, J.
Modes de transmission du virus de l'encephalomyelite des equies en Argentine. Compt. rend. soc. biol. 121: 983-985, 1935.
- Remlinger, P.; and Bailey, J.
Transmission de l'encephalomyelitis argentine des equies a l'oie, au canard, a la buse et au merle. Compt. rend. soc. biol. 121: 146-149, 1936.
- Rosenbusch, F.
Equine encephalomyelitis in the Argentine and its experimental aspects. Proc. Pacific Sci. Congr. 6th Rept. 209-214, 1939.
- Rosenbusch, F.
La immunization activa con el virus de la encefalomyelitis infecciosa en la Argentina. Estudio comparative con el virus Californiano. Ann. del la Soc. rural Argentina. 68: 273, 1934.

PART IV. VENEZUELAN EQUINE ENCEPHALOMYELITIS

- Albornoz, J. E.
Supplement to Bol. de Agric.
#26: 1, 1935. Bogota, Columbia.
- Alice, F. J.
Equine encephalomyelitis in
Bahia; study of three isolated
strains. Rev. brasil. biol.
11: 125-144, 1951.
Biol. Abstr. #4121, 1952.
- * Ayres, J. C.; and Feemster, R. F.
Public-health aspects of the
virus encephalitides. New
England J. Med. 240: 966-975,
1949.
- Basterrechea, L. de.
La encefalomiелitis o peste
loca de las bestias. Agric.
Venezolano. 9: 17-18, 1944.
- * Beck, C. E.; and Wyckoff, R. W. G.
Venezuelan equine encephalo-
myelitis. Science. 8: 530,
1938.
- Carneiro, V.; and Cunha, R.
Studies on infectious equine
encephalomyelitis in Brazil.
Arzuiv. inst. biol. (Sao Paulo).
14: 157-194, 1943.
- * Casals, J.
Heated avirulent antigens for
complement fixation tests with
certain encephalitis viruses.
Science. 102: 618-619, 1945.
- * Casals, J.; Gurnen, E. C.; and
Thomas, L.
Venezuelan equine encephalo-
myelitis in man (laboratory
workers). J. Exptl. Med. 77:
521-530, 1943.
- * Gajdusek, D. Carleton; Anslow,
Ralph O.; Hubbell, Elizabeth J.;
and Yager, Robert H.
Tissue culture studies of
Venezuelan equine encephalo-
myelitis virus. I. Propagation
in human uterine tissue. J.
Immunol. 72: 224-228, 1954.
Biol. Abstr. #571 (1955).
- Gallia, F.
The in vitro effect of the
thiourea and other chemical
compounds on the Venezuela
encephalomyelitis virus. Cuad.
verd. 3rd Conf. Interamer. Agric.
Caracas. #4: 49, 1945.
- Gallia, F.
The virus of spontaneous
encephalomyelitis of mice in
Venezuela. Can. J. Comp. Med.
10: 290-292, 1946.
- Gallia, F.
In vitro effect of thiourea
and other chemical compounds on
Venezuelan virus. Bol. inst.
invest. vet. 2: 201-243, 1944.
- Gallia, F.; and Kubes, V.
Neutralization of Venezuelan
virus by human serum. Bol.
inst. invest. vet. 2: 179-
196, 1944.
- * J. Amer. Med. Assoc. 125:
894-897, 1944.
- Gallo, P.; and Lugo, E.
Estudios clinicos y experi-
mentales sobre un caso de
encefalitis humana debido al
virus encefalomiелitico equino
tipo Venezuela. Rev. med. vet.
parasitol. 6: 33-45, 1947.

PART IV. VENEZUELAN EQUINE ENCEPHALOMYELITIS

- Gallo, P.; and Rios, F. A.
Estudios experimentales sobre el virus de la encefalomyelitis equine en Venezuela. Rev. med. vet. y parasitol. 5: 63-68, 1946.
- Gallo, P.; and Vogelsang, E. G.
Identification of equine encephalomyelitis in Venezuela. Rev. med. vet. y parasitol. 2: 143-148, 1940.
- Gallo, P.; and Vogelsang, E. G.
Le encefalomyelite equine in Venezuela ed il virus venezuelense. Arch. ital. sci. med. Colon. parasit. 20: 321, 1939.
- Gilyard, R. T.
Clinical study of Venezuelan virus in Trinidad. J. Amer. Med. Vet. Assoc. 106: 267-277, 1945.
Also: Bol. inst. invest. vet. 2: 341-366, 1945.
- * Gilyard, R. T.
Mosquito transmission of Venezuelan virus of equine encephalomyelitis in Trinidad. Bull. U. S. Army Med. Dept. #75: 96-107, 1944.
- Hammon, W. M.; and Reeves, W. G.
Recent advances in the epidemiology of the arthropod-borne virus encephalitides. Amer. J. Public Health. 35: 994-1004, 1945.
- Hayes, S. A.
Case of Venezuelan type in human beings. Caribbeian Med. J. 6: 55-56, 1944.
- * Koprowski, H.; and Coc, H. R.
Human laboratory infection of Venezuelan virus. New England J. Med. 236: 647-654, 1947.
- * Koprowski, H.; and Lennette, E. H.
Comparative sensitivity of Venezuelan virus neutralization tests in chick embryos and mice. J. Bact. 51: 257-261, 1946.
- * Koprowski, H.; and Lennette, E. H.
Effect of in vitro cultivation on pathogenicity of Venezuelan equine encephalomyelitis virus. J. Exptl. Med. 84: 205-210, 1946.
- * Koprowski, H.; and Lennette, E. H.
Pathogenesis of Venezuelan virus infections in developing chick embryos. J. Bact. 48: 463-472, 1944.
- * Koprowski, H., Richmond, G.; and Moore, D. H.
Electrophoretic study of antiviral sera. J. Exptl. Med. 85: 515-530, 1947.
- Kubes, Vladimir.
Immunologic relation between Colombian and Venezuelan viruses of equine encephalomyelitis. Bol. inst. invest. vet. 1: 155-167, 1943.
Also: Rev. med. vet., Bogota. 12: 108-116, 1943.
- Kubes, Vladimir.
La peste loca de las bestias. Sus manifestaciones, tratamiento y prevencion. Caracas, Venezuela, 1936. Publ. by Ministerio Agric. Cria.

PART IV. VENEZUELAN EQUINE ENCEPHALOMYELITIS

- Kubes, Vladimir.
Venezuelan type of equine encephalomyelitis in Trinidad.
* Science. 99: 41-42, 1944.
* Amer. J. Vet. Research. 5: 30-31, 1944.
- Kubes, Vladimir; and Diamante, A.
Estudios de inmunidad cruzada entre el virus de la encefalomyelitis equina de Venezuela y los virus encefalomyeliticos norteamericanos este y oeste y el Argentino. Bol. inst. invest. vet. 1: 47-79, 1942.
Bull. Hyg. 18: 344, 1943.
Biol. Abstr. #5646 (1953).
- Kubes, Vladimir; and Rice, F. A.
Datos preliminares sobre el agente etiológico de la encefalomyelitis infecciosa de los equinos en Venezuela. Gac. med. Caracas. 46: 350-352, 1939.
Ibid: Rev. sudamer. Endocr. 12: 575-577, 1939.
- Kubes, Vladimir; Diamante, A.; Ruiz, A. A.
The Venezuelan type of encephalomyelitis in Ecuador. Quad. verd. 3a. Conf. inter-amer. Agric., Caracas. #46: 25, 1945.
- Kubes, Vladimir; and Gallia, F.
Fenomeno de para-inmunidad entre los virus de la encefalomyelitis equina y de la rabia paralitica de Venezuela. Bol. inst. invest. vet. 1: 81-101, 1942.
Biol. Abstr. #21919 (1943).
- Kubes, Vladimir; and Gallia, F.
Neutralization of the Venezuelan encephalomyelitis virus by human sera. Bol. inst. invest. vet. 2: 179-200, 1944.
- Kubes, Vladimir; and Gallia, F.
Phenomenon of paraimmunity between viruses of encephalomyelitis and those of paralytic rabies of Venezuela. Bol. inst. invest. vet. 1: 81-98, 1942.
- Kubes, Vladimir; and Rios, F. A.
Causative agent of infectious equine encephalomyelitis in Venezuela. Science. 90: 20-21, 1939.
- Kubes, Vladimir; and Rios, F. A.
Infectious equine encephalomyelitis in Venezuela. Can. J. Comp. Med. 3: 43-44, 1939.
- Larrañaga, Rivas G.
Equine encefalomyelitis. Memoria cuenta agric. cria, Venezuela. 65, 1943.
- * Lennette, E. H., and Koprowski, H.
Human infection with Venezuelan equine encephalomyelitis virus. Report on eight cases of infection acquired in the laboratory. J. Amer. Med. Assoc. 123: 1088-1095, 1943.
- * Lennette, E. H., and Koprowski, H.
Influence of age on the susceptibility of mice to infection with certain neurotropic viruses. J. Immunol. 49: 175-191, 1944.
- * Lennette, E. H., and Koprowski, H.
Interference between viruses in tissue culture. J. Exptl. Med. 83: 195-219, 1946.
- * Lennette, E. H., and Koprowski, H.
Neutralization tests with certain neurotropic viruses. Comparison of the sensitivity of the extraneural and intracerebral routes of inoculation for the detection of antibodies. J. Immunol. 40: 375-385, 1944.

PART IV. VENEZUELAN EQUINE ENCEPHALOMYELITIS

- * Lennette, E. H.; and Koprowski, H.
Serologic distinction between eastern, western and Venezuelan viruses. Proc. Soc. Exptl. Biol. Med. 60: 110-114, 1945.
- Lepine, P.; Mathis, M.; and Sautter, V.
Infestation experimentale de *Treatoma infestans* par le virus de l'encephalomyelite equine americaine, type Venezuela. Bull. soc. pathol. exotique. 34: 115-118, 1941.
- * Mauer, F. D.; Kuttler, K. L.; and Yager, R. H.
Immunization of laboratory workers with purified trivalent equine encephalomyelitis vaccine. J. Immunol. 68: 109-114, 1952.
- * Murphy, L. G.; Hubbell, E. J.; and Yager, R. H.
Propagation of Venezuelan equine encephalomyelitis virus in cultures of human malignant epithelial cells Strains He La. Amer. J. Vet. Research. 16(59): 304-307, 1955.
- * Randall, R.; Maurer, F.D.; and Smadel, J. E.
Immunization of laboratory workers with purified Venezuelan equine encephalomyelitis vaccine. J. Immunol. 63: 313-318, 1949.
- * Randall, R. and Mills, J. W.
Fatal encephalitis in man due to Venezuelan virus in Trinidad. Science. 49: 225-226, 1944.
- Randall, Raymond; Mills, John W.; and Engel, L. L.
The preparations and properties of a purified equine encephalomyelitis vaccine. J. Immunol. 55: 41-52, 1947.
- * Reeves, W. C.
Epidemiology of the athrop-borne virus encephalitides; a Pan American problem. Bull. Pan. Amer. sanit. Bur. 27: 347-355, 1948.
- Rivas Larralde G.
Encefalomiелitis equina. Memoria cuenta agric. cria, Venezuela. p. 335-339, 1943.
- Roubaud, E.; Lepine, C.; Treillard, M.; and Sautter, V.
Infection experientale de culicoides (aedines) europeens avec le virus de l'encephalomyelitis equine Americane, type Venezuela. Bull. soc. pathol. exotique. 34: 130-133, 1941.
- Roubaud, E.; Levine, P.; Treillard, M.; and Sauter, V.
Experimental infection of *Aedes* species with virus of Venezuelan equine encephalomyelitis. Bull. Hyg. 19: 566, 1944.
Bull. soc. pathol. exotique. 34: 130, 1941.
- Rughero, H. R.; Paredi, A. S.; and Saenz, A. C.
Meningoencefalitis equina venezolana en el hombre. Rev. inst. bact. Malbran. 13: 154-162, 1950.
- Samper, B.; and Soriano Liberas, A.
Further observations on a strain of the equine encephalomyelitis virus. Bol. inst. nac. hig. (Bogota). 10: 5-8, 1943.

PART IV. VENEZUELAN EQUINE ENCEPHALOMYELITIS

- * Sanmartin-Barberi, C.; Groot, H.; and Osorno-Mesa, E.
Human epidemic in Colombia caused by the Venezuelan equine encephalomyelitis virus. Amer. J. Trop. Med. Hyg. 3: 283-293, 1954.
Bull. Hyg. 29: 801, 1954.
- Soriano Alera, A.
Equine encephalomyelitis in Colombia. An. soc. biol. Bogota. 1: 72-74, 1943.
- Soriano Lleras A.; and Figueroa, L.
Aislamiento de un virus de un caballo atacado de "peste loca" en Bogota. Bol. inst. nac. hig. Samper Martinez. #8: 3-15, 1942.
- * Sotomayor, C. G.
A study of the virus of equine encephalomyelitis in Ecuador. J. Amer. Vet. Med. Assoc. 109: 478-480, 1946.
- * Sutton, Leonard S.; and Brooke, Clement C.
Venezuelan equine encephalomyelitis due to vaccination in man. J. Amer. Med. Assoc. 155: 1473-1476, 1954.
- * Traub, Erich.
Serotherapeutische Versuche bei der kunstlichen Infektion des Meerschweichens mit dem virus der Amerikanischen Pferdeencephalitis. Zentr. Bakt. Abt. I. Orig. 147: 81-93, 1941.
- * The trinidad outbreak of equine encephalomyelitis. J. Amer. Med. Assoc. 124: 1204, 1944.

AUTHOR INDEX

- Abdel-Malek, A. 24, 54.
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