Aspirin Aspirations:

Successful Aspirin Desensitization in a Pilot with Chronic Rhinosinusitis with Nasal Polyposis and NSAID Sensitivity.

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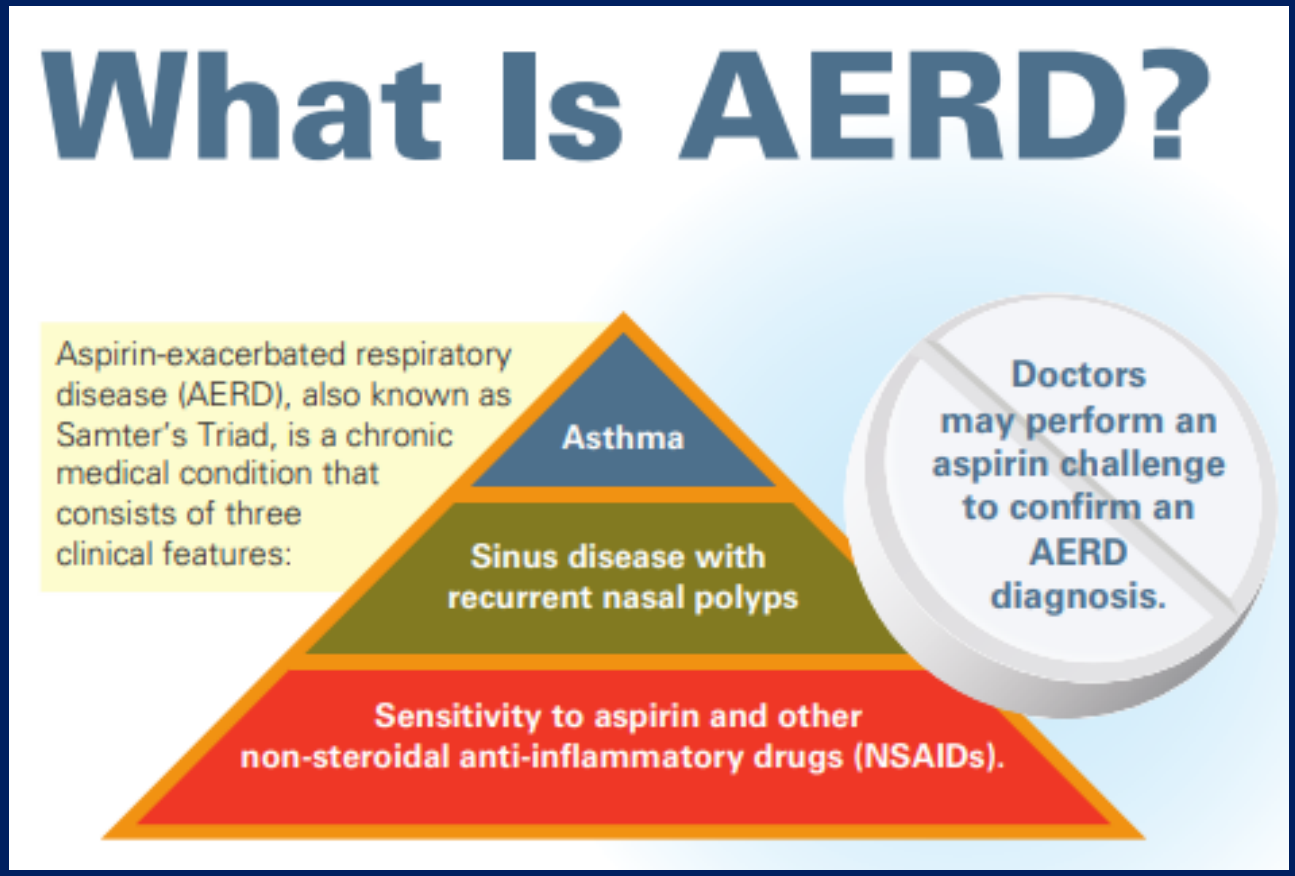
Disclosures

- None

- The views expressed are those of the presenter and do not reflect the official views or policy of the Department of Defense or its components

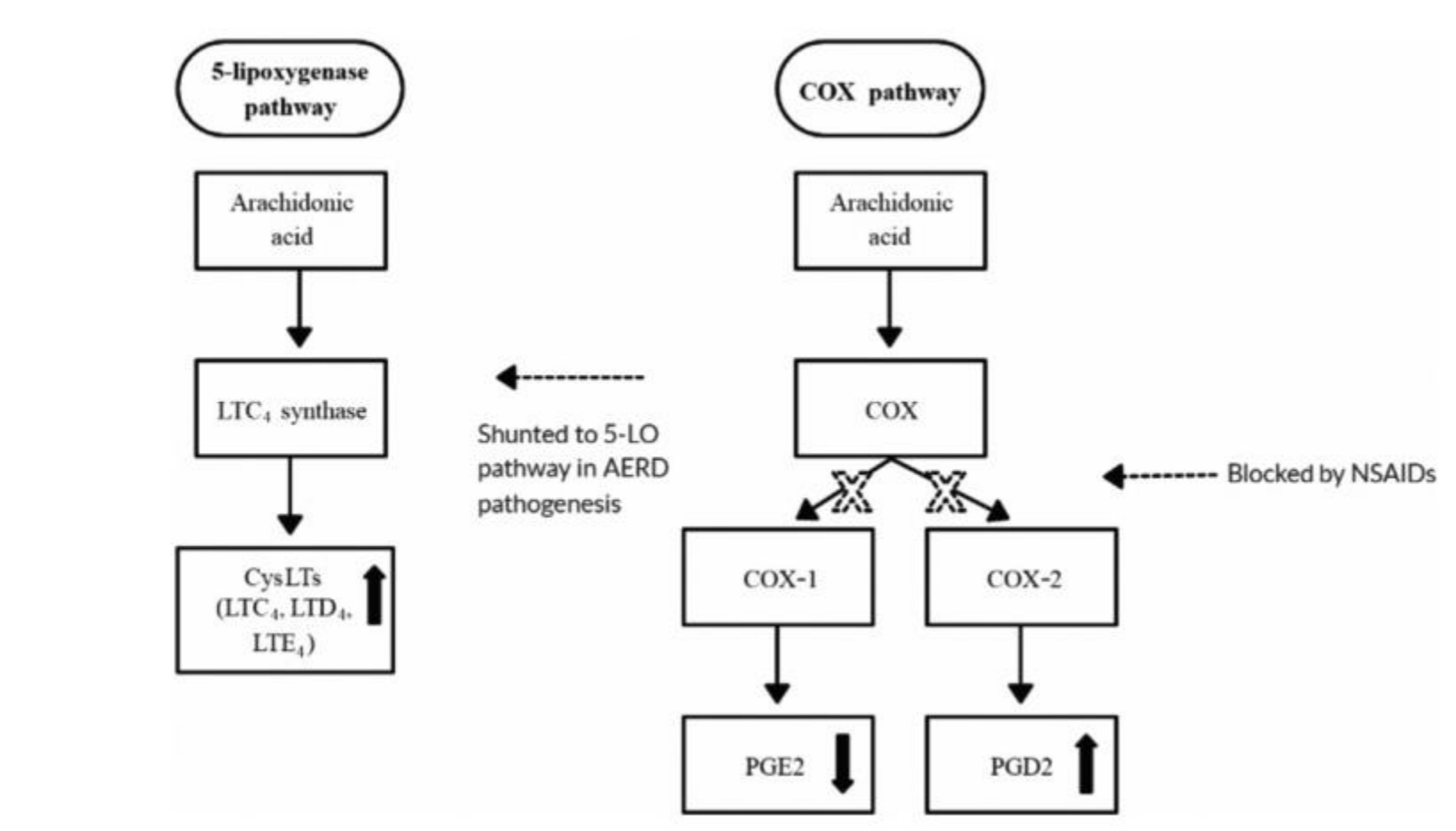
Introduction: AERD



Dominas, Christine et al. "Aspirin-exacerbated respiratory disease: A review." *Laryngoscope investigative otolaryngology*

Allergy and Asthma Network, 2020.

Introduction: AERD



Dominas, Christine et al. "Aspirin-exacerbated respiratory disease: A review." *Laryngoscope investigative otolaryngology* vol. 5,3 360-367.

Introduction: Military Relevance

- Discusses relevant disqualifying conditions
- Does not directly address biologics

Introduction: Military Relevance

- Addresses limited biologics (adalimumab, infliximab)
- Addresses aspirin

Case Presentation

- 32-year-old male with PMH of CRSwNP and NSAID sensitivity was referred for aspirin desensitization
  - Status post multiple sinus surgeries

Baseline Evaluation

- PFTs
- NSAID sensitivity confirmation

Baseline PFTs

Volumes:

	Units	Pred	Pre	% Pred	Post	%Change
FVC	L,btps	5.36	6.56	122 >	6.52	-1
FEV1	L,btps	4.45	4.81	108	5.23	9
FEV1/FVC	%	81	73	90	80	9

Confirmation of NSAID Sensitivity

STEP	TIME (time dose is given or when vitals are taken)	HR	RR	BP	FEV1	Lower respiratory (cough, wheezing, chest tightness, SOB) or Nasal ocular sxs (sneezing, rhinorrhea, congestion, itching, eye sxs?)
1 Spray Ketorolac	~~0800~~ 0845	67	16	126/71	4.79	No symptoms at baseline 1-2/10 0830) ⓁFA #20g PIV placed ✓ difficulty -Cthyd
2 Sprays Ketorolac	~~0830~~ 915	—	—	—		1-2/10
4 Sprays Ketorolac	~~0900~~ 953	—	—	—		2/10 slight congestion
6 Sprays Ketorolac	~~0930~~ 1030	—	—	—		2-3 increase in congestion 4/10 congestion 10mg zyrtec 10:52

Desensitization

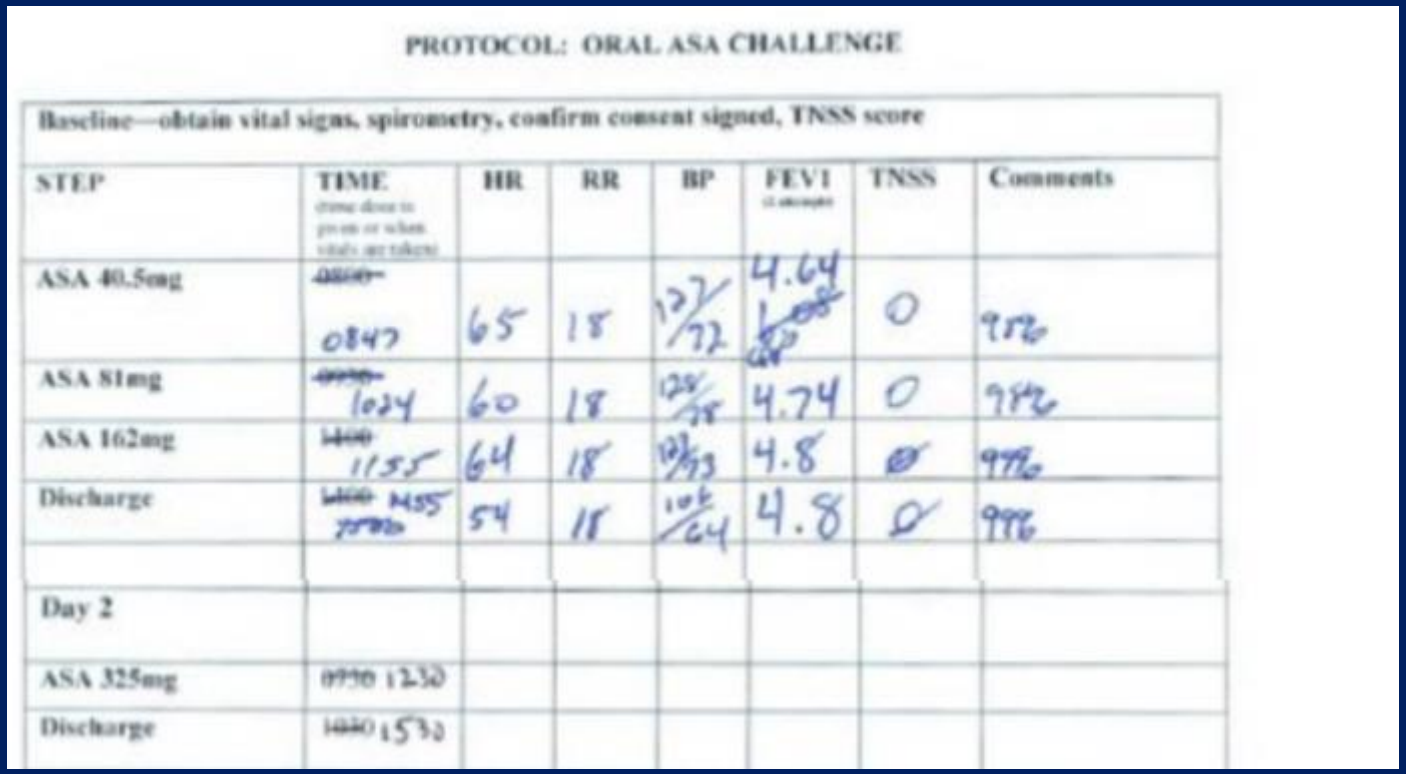
ASA 60mg	~~1030~~ 1130	60	14	/	4.37	2 puffs albuterol as prevention 81. dry FEV1
ASA 60mg	~~1200~~ ~~1300~~ 25	80	16	/	5.07	2/10 clear lung sounds
	1525	64	14	/	4.81	
						1543) PIV D/c catheter intact, site was
Day 2						0810) (R) FA #20g PIV placed difficulty - Ch
ASA 162mg	~~0800~~ 0830	77	16	115/68	4.60	1/10 symptoms clear lungs at baseline
ASA 325mg	~~1100~~ 1130	50	16		4.49	1/10 symptoms clear lungs
						1345) PIV D/c catheter intact, site was

Maintenance of Desensitization

- Return to flying status
- Weaning of dosing with continued efficacy

Repeat Desensitization

- Required after holding aspirin peri-operatively



PROTOCOL: ORAL ASA CHALLENGE

Baseline—obtain vital signs, spirometry, confirm consent signed, TNSS score

STEP	TIME (time dose is given or when vitals are taken)	HR	RR	BP	FEV1 (2 attempts)	TNSS	Comments
ASA 40.5mg	~~0850~~ 0847	65	18	127/72	4.64 ~~4.68~~	0	98%
ASA 81mg	~~0950~~ 1024	60	18	128/78	4.74	0	98%
ASA 162mg	~~1050~~ 1155	64	18	123/73	4.8	0	99%
Discharge	~~1150~~ ~~1250~~ 1455	54	18	104/64	4.8	0	99%
Day 2							
ASA 325mg	~~0950~~ 1230						
Discharge	~~1050~~ 1530						

Maintenance of Desensitization

- Remains on 325 mg QD for 5 years as of this month
- No polyp regrowth
- No requirement for systemic antibiotics or steroids in last 2 years

Discussion

- Advantages and limitations of the myriad treatments for AERD
- Cost effectiveness
- Clinical effectiveness
- Side effects
- Society guidelines
- Medical readiness

Yong et al, 2021
Oykhman et al, 2021
Wallace, 2021

Conclusion

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