Eddie A. Kwan, MD
Eddie.a.kwan@gmail.com
San Antonio Uniformed Services Health Education Consortium

Grant M. Williams, MD
grant.m.williams15.mil@mail.mil
San Antonio Uniformed Services Health Education Consortium

Michael Lewin-Smith, MD
michael.r.lewin-smith.civ@mail.mil
The Joint Pathology Center

Mark S. Lincoln, MD
mark.s.lincoln.mil@mail.mil
San Antonio Uniformed Services Health Education Consortium

Abigail J. Lee, MD
abigail.j.lee.mil@mail.mil
San Antonio Uniformed Services Health Education Consortium

Wilford Hall Ambulatory Surgical Center
1100 Wilford Hall Loop
JBSA-Lackland AFB, TX 78236

Brooke Army Medical Center
3551 Roger Brooke Dr.
Fort Sam Houston, TX 78234

The Joint Pathology Center
606 Stephen Sitter Avenue
Silver Spring, MD 20910

We present a case of a 63-year-old Hispanic female with a past medical history significant for type II diabetes mellitus who presented with a one-year history of painful migratory nodules on her abdomen. She reported that approximately two months after beginning weekly injections with exenatide for diabetes she noticed a tender lesion on the left lower quadrant of her abdomen. Her primary care physician diagnosed it as a lipoma. Over the subsequent months she developed a new painful nodule roughly every week on her abdomen that coincided with prior exenatide injection sites. She stated that the lesions were initially painful then spontaneously resolved after several weeks. On examination there were two 1cm deep-seated nodules that were tender to palpation without any overlying epidermal changes. An ultrasound demonstrated two 3-6mm foci of increased echogenicity in the subcutaneous fat. One 4mm punch biopsy of each of the two lesions demonstrated a predominantly septal panniculitis containing amorphous material associated with a mixed inflammatory infiltrate. No organisms were identified with GMS and AFB stains; however, the AFB stain highlighted the amorphous material. Infrared spectroscopy of the material closely matched normal tissue containing poly(lactide-co-glycolide) (PLGA). Exenatide extended-release is incorporated in PLGA microspheres. Given the clinical presentation, histologic findings, and infrared spectroscopy results, a diagnosis of exenatide

induced panniculitis was made. Clinicians should be aware of possible injection site reactions with subcutaneously administered medications.

"The views expressed are those of the [author(s)] [presenter(s)] and do not reflect the official views or policy of the Department of Defense or its Components"

"The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02_AFI 40-402."

References

Andrés-Ramos, Irene, et al. "Exenatide-Induced Eosinophil-Rich Granulomatous Panniculitis." *The American Journal of Dermatopathology*, vol. 37, no. 10, 2015, pp. 801–802., doi:10.1097/dad.0000000000000243.

Jones, S. C., et al. "Injection-Site Nodules Associated With the Use of Exenatide Extended-Release Reported to the U.S. Food and Drug Administration Adverse Event Reporting System." *Diabetes Spectrum*, vol. 28, no. 4, 2015, pp. 283–288., doi:10.2337/diaspect.28.4.283.

Ko, Jung-Woo, et al. "Eosinophilic Panniculitis Following the Subcutaneous Injection of Exenatide Extended-Release." *Annals of Dermatology*, vol. 32, no. 3, 2020, p. 230., doi:10.5021/ad.2020.32.3.230.

Riswold, Kayla, and Valerie Flynn. "Persistent Injection Site Nodules from Exenatide: Successful Treatment with Intralesional Triamcinolone." *JAAD Case Reports*, vol. 4, no. 8, 2018, pp. 830–832., doi:10.1016/j.jdcr.2018.06.009.

Vidal, Claudia I., et al. "Exenatide-Induced Panniculitis." *The American Journal of Dermatopathology*, vol. 40, no. 11, 2018, pp. 867–869., doi:10.1097/dad.0000000000000952.