

## Soft tissue calcium deposits

Yoen Young Chuah,<sup>a</sup> Yeong Yeh Lee<sup>b</sup>

From the <sup>a</sup>Division of Gastroenterology and Hepatology, Department of Internal Medicine, Ping Tung Christian Hospital, Ping Tung, Taiwan; <sup>b</sup>Division of Gastroenterology and Hepatology, Department of Internal Medicine, University Sains Malaysia Health Campus, Kelantan, Malaysia

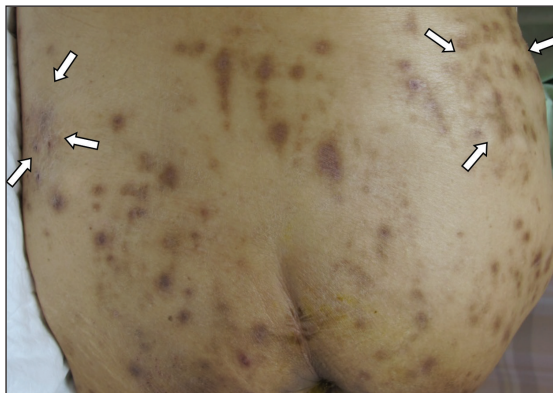
Correspondence: Dr. Yoen Young Chuah · Department of Internal Medicine, Ping Tung Christian Hospital, 60, Di-Lian Road, Pingtung 900, Taiwan · T: +886-8-736-8686 F: +886-8-737-8620 · yoenyongchuah@gmail.com · ORCID: <http://orcid.org/0000-0001-8921-2912>

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**C**alcinosis cutis is a disorder characterized by the deposition of insoluble calcium salts in the skin or subcutaneous tissue. There are five subtypes of calcinosis cutis: dystrophic, metastatic, idiopathic, iatrogenic, and calciphylaxis. The skin lesions (**Figure 1**) and the abdominopelvic x-ray (**Figure 2**) findings are compatible with dystrophic calcinosis cutis, and this condition is most often associated with autoimmune connective tissue disease. The patient had a negative workup for autoimmune markers.

Calcinosis cutis is also believed to be part of a continuum of the systemic vascular and soft-tissue calcification that is common in end-stage renal disease (ESRD), but ESRD was not present in this patient. The physical act of injection of drugs such as interferon beta-1a, nadroparin and para-amino-salicylic acid have been reported as other less common causes of calcinosis cutis, which often develops after repeated injections.<sup>1-3</sup> The repeated injury from injections at the same site (heroin injections in this patient) underlies the chronic granulomatous inflammatory process resulting in calcinosis rather than the medications per se. Existing therapies for dystrophic calcinosis cutis are limited to known associations mentioned above. However, surgical removal of the calcified nodules may be needed for infection, ulceration, pain control and functional impairment. There was no further management in this patient since there was no surgical indication. The size of the skin nodules remained unchanged during subsequent follow-ups over a year.



**Figure 1.** A 49-year-old female prisoner with history of heroin abuse with multiple injections in her buttocks. The picture shows multiple subcutaneous hard nodules (white arrows) over her upper buttocks.



**Figure 2.** Abdominal and pelvic x-ray shows multiple calcified soft-tissue deposits (white arrows) in the pelvic area.

## REFERENCES

1. Macbeth AE, Kendall BR, Smith A, Saldanha G, Harman KE. Calcified subcutaneous nodules: a long-term complication of interferon beta-1a therapy. *The British Journal of Dermatology* 2007;157(3):624-5. Epub 2007/06/29.
  2. Nuno-Gonzalez A, Calzado-Villarreal L, Gutierrez-Pascual M, Gamo-Villegas R, Sanz-Robles H, Sanchez-Gilo A, et al. An unusual adverse effect of nadroparin injections: Calcinosis cutis. *Dermatology Online Journal* 2011;17(11):4. Epub 2011/12/06.
  3. Meissner M, Varwig D, Beier C, Jacobi V, Kaufmann R, Gille J. Dystrophic calcinosis cutis after subcutaneous administration of para-aminosalicylic acid for treatment of pulmonary tuberculosis. *Journal der Deutschen Dermatologischen Gesellschaft = Journal of the German Society of Dermatology: JDDG* 2006;4(6):489-91. Epub 2006/06/01. Dystrophe Calcinosis cutis nach subkutaner Verabreichung von Para-Amino-Salizylsaure zur Behandlung einer Lungentuberkulose.
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