

A Case of Foreign Body Granuloma Caused by Acupoint Catgut Embedding Therapy for Obesity

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Dear Editor:

Foreign body granuloma (FBG), defined as inflammatory reaction induced by various exogenous or endogenous materials, has quite different manifestations and outcomes in patients with different causes¹, thus a thorough understanding of the causes is very important for early recognition and treatment of FBG. Acupoint catgut embedding therapy (ACET), a widely used traditional Oriental medicine therapy has rarely been reported as a cause of FBG^{2,3}. Here we report a case of FBG in a female after accepting ACET for obesity.

A 57-year old female presented asymptomatic skin leisons on her abdomen and waist for 8 months. She underwent ACET for obesity 1 month prior to the visit. Physical examination revealed indurated erythema with obscure boundary on her abdomen and waist (Fig. 1). Multiple subcutaneous hard nodules were palpated, ranging from bean-sized to egg-sized with poor mobility and skin was felt warm. Histopathologically, multiple variable-sized histiocytic aggregates were recognized extensively in the whole dermis with a few lymphocytes. Basophilic non-structural intracellular substances were found in the histiocytes. The nuclei of giant cells were diffusely scattered (Fig. 2). White cell count was normal. She was diagnosed as FBG and had tried multiple treatments, including betamethasone intralesional injection and topical corticosteroid without significant improvement. We received the patient's consent form about publishing all photographic materials.

ACET is a traditional Oriental medicine therapy prevailing in East Asian countries, in which suture is embedded into acupoints aseptically². It is believed that the existence of the suture will recruit local immune cells, regulate inflammatory cytokines levels, change the metabolic activity and enhance local circulation³. ACET is widely used in several diseases, such as chronic pain, epilepsy, obesity, and constipation et al.^{2,3} In previous researches, suture implantation has been recognized universally as a cause of FBG in surgery⁴. However, little attention was paid to the role of

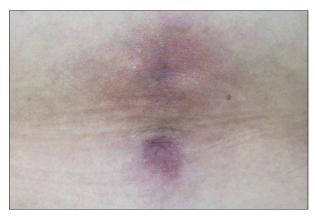


Fig. 1. Clinical presentation. Indurated erythema with obscure boundary is located on her abdomen.

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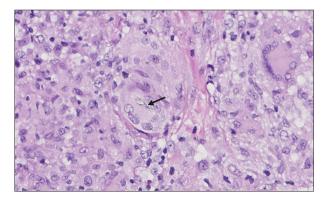


Fig. 2. Histopathology of the lesion. Skin biopsy from the lesion reveals several histiocytic granulomas containing basophilic non-structural substance (arrow) (H&E; original magnification, ×200).

catguts as a potential cause of FBG in patients who had undergone ACET². In 2011, Chuang et al.⁵ reported the first case of a patient who developed FBG 1 month after accepting ACET for obesity. In that case, multiple beansized tender itchy erythematous nodules with linear distribution were observed and regressed spontaneously. However, despite several treatments, the skin lesions of our patient did not resolve after 9 months. The rate of the catgut absorption depends on the suture location and status of the wound process determined by the counts and quality of cell population surrounding the catgut⁴. Importantly, the features of FBG induced by ACET are summarized as follows: firstly, a history of accepting ACET; secondly, mainly presenting as erythematous nodules with line arrangement; thirdly, asymptomatic or itchy; lastly, outcome was uncertain because that spontaneous resolution or inefficacious to many therapies could also be observed.

Dermatologists should be aware that ACET may be a cause of FBG when an overweight Asian with multiple indurated erythema and subcutaneous nodules on specific areas of the body comes to seek medical care. Careful history taking is important for the differential diagnoses.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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DATA SHARING STATEMENT

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