

Actinic granuloma: A case report

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ABSTRACT :

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Actinic granuloma is an uncommon non-infectious granulomatous skin disease, which pathogenesis is still unclear. Diagnosis is made by a histopathology of granulomatous inflammation with distinct elastophagocytosis. Response to treatment is not appreciable.

We report a 51-year-old woman presenting with multiple asymptomatic slow growing annular erythematous plaques aggravated by sunexposure. Histopathology revealed diffuse granulomatous reaction with engulfment of elastic, elastophagocytosis. She was treated with oral acitretin with moderate response but the medication was discontinued due to transaminitis.

Key word: Actinic granuloma, Annular elastolytic giant cell granuloma, Elastophagocytosis

บทคัดย่อ:

ปิยรัตน์ เสธฐบุตร, สุมณัส บุญยะรัตเวช, เพ็ญวดี พัฒนปรีชากุล. รายงานผู้ป่วยโรค ACTINIC GRANULOMA วารสารโรคผิวหนัง 2556; 29: 189-193.

ภาควิชาตจวิทยา คณะแพทยศาสตร์ศิริราชพยาบาล

Actinic granuloma เป็นโรคผิวหนังที่พบการอักเสบแบบ granuloma ที่พบไม่บ่อย กลไกการเกิดโรคยังไม่ทราบชัดเจน การวินิจฉัยทำได้โดยการตัดชิ้นเนื้อส่งตรวจทางพยาธิวิทยา ซึ่งจะพบการอักเสบแบบ granuloma และ elastophagocytosis การตอบสนองต่อการรักษาไม่ค่อยดีนัก

คณะผู้นิพนธ์รายงานผู้ป่วยหญิงอายุ 51 ปี มาด้วยผื่นปื้นแดงเป็นรูปวงแหวน โตช้าๆและไม่มีอาการ โดยผื่นจะลามมากขึ้นเมื่อออกแดด ผลตรวจชิ้นเนื้อทางพยาธิวิทยา พบการอักเสบแบบ granuloma ร่วมกับพบ elastophagocytosis ผู้ป่วยได้รับการรักษาด้วย acitretin ชนิดรับประทาน ซึ่งการตอบสนองต่อการรักษาค่อนข้างดี แต่จำเป็นต้องหยุดเนื่องจากหลังให้การรักษามีค่าตับ transaminitis เพิ่มขึ้น

คำสำคัญ: โรคเอ็กทีนิก แกรนูโลมา, โรคแกรนูโลมาชนิดไจแอนท์เซลล์ที่มีลักษณะเป็นแผ่นวงแหวน, การกินเส้นใยอีลาสติคโดยไจแอนท์เซลล์

Case Report

A 51-year-old woman with diabetes, hypertension and dyslipidemia, presented with multiple asymptomatic slow growing annular erythematous plaques. The lesions initially started on the dorsum of hands spreading proximally to the dorsum of both arms and V-shape of neck for a duration of five years. She reported aggravation of the skin lesions upon sunexposure. She was treated with potent topical steroids but showed no response to treatment. Physical examination revealed a middle-age Thai woman, normosthenic built, not pale, no icteric sclera. Skin examination revealed multiple discrete annular erythematous dermal plaques on dorsum of both hands, extensor surface of both forearms, V-shape of the neck and lateral sides of the face and the neck. Systematic reviewed were unremarkable. Histopathology taken from her left forearm revealed normal epidermis, diffuse solar elastosis background within the dermis, diffuse granulomatous reaction with a zone consisting of histiocytes and foreign type giant cells, engulfment of elastic fibres (elastophagocytosis). She was diagnoses as Actinic granuloma.



Figure 1



Figure 2



Figure 1-4 Multiple discrete annular erythematous dermal plaques on dorsum of both hands, extensor surface of both arms, V-shape of the neck and lateral sides of the face and the neck

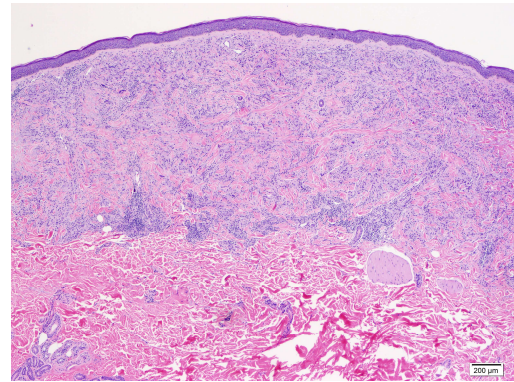


Figure 5 Haematoxylin-eosin stain. Original magnification x4

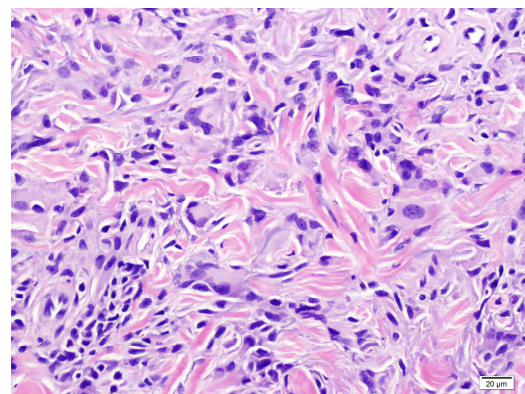


Figure 6 Haematoxylin-eosin stain. Original magnification x40

Figure 5-6 Diffuse granulomatous reaction with a zone consisting of histiocytes and foreign type giant cells, engulfment of elastic fibres (elastophagocytosis)

Discussion

Actinic granuloma is an uncommon non-infectious granulomatous skin disease, commonly presenting with annular dermal plaques on sunexposed areas. The lesions are usually slow growing and asymptomatic.

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The condition was first described in 1975 by O'Brien who coined the term 'actinic granuloma', and suggested an elliptical biopsy technique for the diagnosis consisting three zones of the lesion, I) The surrounding normal showing marked solar elastosis, II) The thickened annular zone showing granulomatous reaction consisting histiocytes and multinucleated giant cells and elastophagocytosis, and III) The inner zone inside the annulus showing no elastic fibres.¹ Another synonym is 'annular elastolytic giant cell granuloma', coined by Hanke et al. in 1979.² To date the pathogenesis is still unclear, but some evidence support a primary role of elastin fragments. A study by Fujimoto et al.³ showed factor XIIIa+ cells and CD68+ macrophages found in lesional skin which was induced by elastin fragments.

Although initially considered to be a variant of granuloma annulare, there are several studies to date showing evidence that these two might be separate entities.⁴⁻⁶ However there is still debate and no consensus. Some studies found co-existent histologic features of these two conditions.⁷⁻⁹

The histologic feature differentiating actinic granuloma from granuloma annulare include the absence of mucin and necrobiosis, the presence of nonpalisading granulomas with multinucleated giant cells and the inflammatory process usually limited to the superficial dermis in the previous. Elastophagocytosis is usually not seen in the latter.⁶

Treating actinic granuloma is difficult, with generally minimal response to potent topical steroid.¹ There have been reports of successful treatment with sunprotection¹, systemic medications such as chloroquine¹⁰ and retinoids^{11, 12}. Our case was treated with acitretin 25 milligrams daily for a period of one month which showed minimal improvement, but unfortunately she developed transaminitis so the treatment was stopped.

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