

Lymphocytoma Cutis on Fine Needle Aspiration Cytology

Shailaja Shukla*¹, Mona Bargotyia¹, Geetika Sharma¹, Taru Garg²

¹Department of Pathology, Lady Hardinge Medical College, New Delhi, India

²Department of Dermatology, Venerology and Leprosy, Lady Hardinge Medical College, New Delhi, India

Sir,

Lymphocytoma cutis (LCC) is a rare pseudolymphoma also known as 'cutaneous lymphoid hyperplasia' (CLH). It is not a specific disease but a response to a variety of known and unknown stimuli that results in the accumulation of lymphocytes and other inflammatory cells in a localized region. It manifests clinically as asymptomatic, indolent, nodular lesions of different sizes varying between 2 and 5 cm, usually solitary, mainly on exposed areas of the body like face (70%) and neck. Most of the cases cannot be attributed to any cause and are termed idiopathic. When the cause is known, it should be included in the diagnosis. Individuals of any age may be affected, but lymphocytoma cutis is most common in early adulthood. The median age of presentation is 34 years, with females affected more than males (2:1). Lymphocytoma cutis is not associated with mortality and is rarely associated with morbidity other than minor pain or pruritus and generally heals without scarring.

Herein, we are describing a case of lymphocytoma cutis in a 42-year-old female who presented with a solitary, firm red-colored nodule measuring 2.5x2cm on the left cheek for past one month. The nodule was not itchy and there was no recent history of drug intake, tattooing, insect bite or allergy. There were no constitutional symptoms and associated lymphadenopathy and/or organomegaly. FNA smears were moderately cellular showing a polymorphous population of lymphoid cells comprising of mature and transformed lymphocytes along with few plasma cells and occasional tingible body macrophage. A diagnosis of lymphocytoma cutis was suggested. However, biopsy confirmation could not be done as the patient refused due to cosmetic reasons.

Pathogenesis of LCC remains unknown and most cases are idiopathic. Certain drugs (phenytoin, phenobarbital,

fluoxetine) and long-term antigenic stimulation (tattoos, trauma, body piercing, jewelry, cobalt, leeches, and insect bites) are implicated in many cases.^[1] Rarely, infectious agents such as *Borrelia* species and *Molluscum contagiosum* have been linked with CLH. Borrelial lymphocytoma is more common in children than adults and is most often observed in Europe.^[2] There was no such irritant implicated in our patient though she gave a history of having changed her cosmetic face cream recently. Although patients usually are asymptomatic, many seek treatment for cosmetic reasons. Lesions of LCC often regress spontaneously, though some cases become chronic and others recur locally.^[3]

Biopsy is necessary to establish a diagnosis of LCC. On histologic examination, lesions of LCC may display multiple lymphoid follicles and dense superficial to deep infiltration of mostly mature lymphocytes. Lymphocytes often are admixed with histiocytes and occasional plasma cells showing a polyclonal pattern on immunohistochemical staining. In contrast, cutaneous lymphomas are monoclonal in nature on IHC. In the absence of a biopsy, the benign clinical behavior and a mixed population of lymphoid infiltrate along with presence of tingible body macrophages pointed to a diagnosis of pseudolymphoma or LCC. However, a clinical follow-up for 5 years is warranted as cutaneous B-cell lymphoma may sometimes have an indolent course.^[3] Moreover, it is now believed that pseudolymphomatous and lymphomatous proliferations represent two ends of a spectrum where antigen-driven lymphoproliferation progresses to lymphoma^[4] e.g., *Helicobacter pylori*-related gastric MALT lymphoma.

Reported therapies for persistent or idiopathic cases include local corticosteroids, cryosurgery, local radiation, excision, interferon alpha application, and laser ablation. Our patient

***Corresponding author:**

Dr. Shailaja Shukla, Professor of Pathology, Lady Hardinge Medical College, New Delhi-110001

Phone: +91 9811439308, 011-28033599

E-mail: shailajashukla@gmail.com, shukla_shailaja@yahoo.com



is responding well to topical corticosteroids and the size of her lesion has reduced considerably. The present case highlights the role of a simple procedure like FNAC in establishing the diagnosis of LCC in the rare event where biopsy cannot be performed. However, precaution must be taken that cytological features are interpreted in the light of clinical findings.



Fig. 1: Erythematous nodule on face.

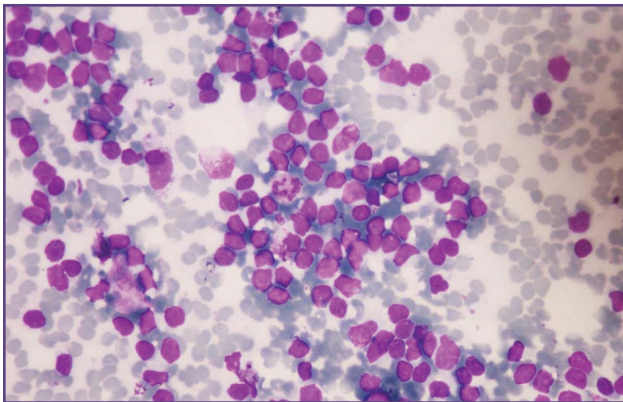


Fig. 2(a): FNAC smear showing polymorphous population of lymphoid cells (Wright-Giemsa x400).

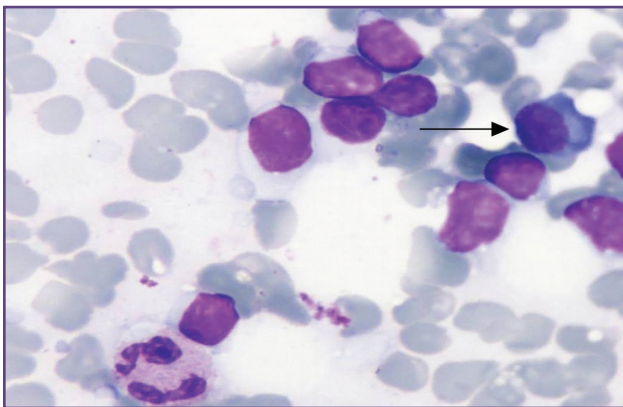


Fig. 2(b): FNAC smear showing mature and transformed lymphocytes and plasma cells (Wright-Giemsa x1000).

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