A young female aged 36 yrs presented with complaints of multiple asymptomatic papules on the extensor surface of bilateral elbows and knees since 3 months. She also gave history of red raised small lesions on bilateral lower 1/3rd of the legs since 7 days. There was no history of fever, sore throat, or pain in the abdomen. She further informed about four previous episodes of similar red raised lesions on legs in the past 1 year, which had subsided with some tablets.

On examination, multiple skin colored to yellowish flat papules were noted in the aforementioned sites [Figure 1]. The papules were mildly tender, firm, and diascopy did not yield apple-jelly appearance. The lower third of legs [Figure 2] showed palpable erymatomus purpuric lesions without any blanching. There were no other significant cutaneous findings. Systemic examination was normal. Biopsy was performed from the erythematous lesions on the legs [Figure 3] and skin colored papules on the knee [Figures 4 and 5].

Histopathology of the lesion from the leg showed features of leucocytoclastic vasculitis [Figure 3]. The biopsy from skin colored lesion on knee displayed vessel wall damage, infiltration of vessel wall by neutrophils, and a perivascular infiltrate of neutrophils and few lymphocytes and occasional eosinophils. Extravasation of RBCs and nuclear dust were noted. Interestingly, an admixture of foam cells amidst the infiltrate near blood vessels is noted [Figure 4]. On high power view (40X), foamy cells around blood vessels amidst few lymphocytes and polymorphs in the vicinity of the vessel was confirmed [Figure 5].

**Question**

What is your diagnosis?

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Kantamuneni, et al.: Skin‑coloured papules with foamy cells

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Answer

Final Diagnosis: Leukocytoclastic vasculitis-Erythema elevatum diutinum (EED) with extracellular cholesterolosis.

Discussion

EED is a distinctive form of chronic cutaneous vasculitis, presenting as persistent, symmetrical, firm, tender, and red to brown papules or nodules that may coalesce to form plaques. They are commonly found on the extensor surfaces especially near joints such as the fingers, hands, elbows, ankles, and knees. After partial resolution, lesions may resemble xanthomata because of a yellowish or brown hue of the lesions.[1]

Histopathologic Features

In the early stage, nonspecific leukocytoclastic vasculitis is observed. On low power, a busy dermis with a mild superficial and dense perivascular inflammatory infiltrate is observed. On further magnification, RBC extravasation, leukocytoclasis (neutrophil degeneration) forming nuclear dust and fibrinoid necrosis of the vessels can be noted. Chronic lesions show a mixture of lymphocytes, plasma cells and macrophages along with the hemorrhagic, fibrinoid leukocytoclastic vascular changes. Nodular lesions may show areas of fibrosis and capillary proliferation within the inflammatory lesion. The capillaries may show deposits of fibrinoid material or merely fibrous thickening.[2] Lipid material also may be present as cholesterol clefts in old, fibrotic lesions of EED. Such cases have been documented as extracellular cholesterolosis in EED.[3‑5]

EED may be associated with underlying bacterial infections or paraproteinemia. The drug of choice for treating EED is dapsone. Other treatments tried are colchicine, methotrexate, oral, and intralesional steroids. Our patient was treated with dapsone to which the patient responded well. Cases of extracellular cholesterolosis have become a rarity in recent years as EED is easily treatable with dapsone.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent form for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity.

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Conflicts of interest

There are no conflicts of interest.

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