Comedone-like changes overlying neurofibromas

Sir,

Three females aged 35, 38 and 16 years with type 1 neurofibromatosis, were seen in the skin department. None of them had a similarly affected first degree relative. All of them had more than six cafe-au-lait macules with multiple cutaneous neurofibromas. Two of them had more than two iris Lisch nodules. On close examination, some of the cutaneous neurofibromas showed follicular dilatation and plugging resembling comedones on their surface [Figure 1].

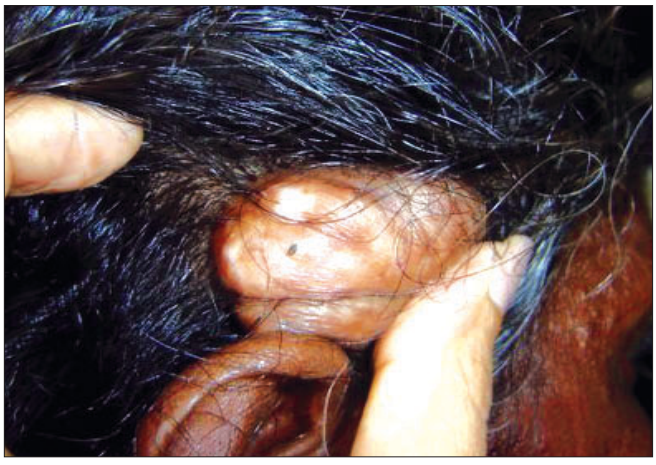

Figure 1: Pedunculated neurofibroma with comedone-like changes.

Histological examination of these nodules were diagnostic of neurofibroma with dilated follicular ostia filled with keratinous plugs and pilar differentiation.

Pilar dysplasia and folliculosebaceous differentiation have been described in neurofibromatosis by del Rio *et al.* in two patients.[1] They considered it to be a stimulation phenomenon reflecting the essential role of the stroma in many cutaneous epithelial hyperplasias, hamartomas and possibly in some neoplasms. Various growth factors and their receptors are present in cutaneous neurofibromas. Mast cells, nonspecific cholinesterase, S-100 protein, myelin basic protein and factor XIIIa have been demonstrated in neurofibromas.[2] Epidermal follicular differentiation may follow induction by several dermal mesenchymal proliferations including dermatofibroma, focal mucinosis, scar, nevus sebaceous, dermatofibrosarcoma protuberans and hemangioma.[3] Follicular induction may yield a spectrum of follicular differentiation from germinative basaloid hyperplasia to advanced follicle formation. The production of the comedones in the overlying skin of neurofibromas could be due to the defective formation of follicle ostia.

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