Case Report

Lobular capillary haemangioma arising from a vascular malformation

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ABSTRACT

Lobular capillary haemangioma also known as granuloma pyogenicum or pyogenic granuloma, refers to a common, acquired, benign, vascular tumor that arises in tissues such as the skin and mucous membranes. The occasional eruption of a lobular capillary haemangioma from vascular lesions like haemangiomas or existing port-wine stains suggests abnormalities in blood flow.

Keywords: Congenital haemangioma, Lobular capillary haemangioma, Skin and mucous membranes

INTRODUCTION

Lobular capillary haemangiomas (commonly known as 'pyogenic granuloma', a misnomer), a benign proliferation of capillaries are common overgrowths of vascular tissue that usually arise on the face, lips, or hands after episodes of minor trauma and over the gingiva during pregnancy. Lobular capillary haemangioma has no age preponderance but are more common in children and young adults, especially in men. Lobular capillary haemangioma displays various clinical features suggestive of reactive neovascularisation. It has limited capacity to grow, with a propensity for multiple eruptions that may be localized or disseminated.

Pyogenic granuloma arising in congenital malformations such as port-wine stain is rare, most commonly occurs during pregnancy or after laser treatment of port-wine stains. The simultaneous occurrence of two lesion is not so common. We hereby report a rare case of a lobular capillary haemangioma emerging from a port wine stain, in a 62-year-old woman with no predisposing factors.

CASE REPORT

A 62 years old woman presented to the skin out-patient department with a history of a raised lesion over the left lateral canthus of the eye, since, 5 years with increase in size over the past 1 year (Figure 1). There was no history of any discharge from the lesion. There was no history of trauma or bleeding from the lesion.

On physical examination, the patient had a pedunculated lesion with a rough surface arising from a reddish plaque which was present from birth suggestive of a port-wine stain. Under local anaesthesia, lobular capillary haemangioma was excised along with base of lesion and sent for histopathologic examination.

Histopathological examination revealed an atrophic epidermis with a large number of dilated dermal papillary capillaries amongst a fibrous stroma whilst another section taken from the base of the lesion showed large dilated capillaries filled with numerous red blood cells within them.
Figure 1: Clinical photograph showing a pedunculated lesion over the left lateral canthus of eye overlying a red plaque suggestive of a port-wine stain.

Figure 2 (A-B): Histopathological picture- Scanner view showing atrophic epidermis with large number of dilated dermal papillary capillaries filed with RBC’s amongst a fibrous stroma.

Figure 3: Histopathological picture: High power view showing dilated vessels filled with RBC’s.

DISCUSSION

Lobular capillary haemangioma or pyogenic granuloma is a benign vascular tumour of the skin or mucous membrane characterized by rapid growth and a friable surface. It is one of the most common vascular tumours of infants and children and can also occur in adults, particularly in pregnant women. It presents as a solitary, red, rapidly growing papule or nodule, often with a subtle collarette of scales. Typical locations include the cheek or forehead but virtually any body site including the mucous membranes may be affected. Lobular capillary haemangioma was reported in association with the intake of drugs like systemic retinoids and indinavir. They often develop on an eroded surface, with subsequent bleeding. Clinically, lobular capillary haemangioma has to be differentiated from amelanotic melanoma, bacillary angiomatosis or kaposi sarcoma in the immuno-compromised patient. Histological confirmation helps in aiding the diagnosis. Even after definitive treatment, recurrence and even satellite lesions surrounding the original lobular capillary haemangioma have been reported. Simple curettage with electrocautery is usually curative. In case of children, Pulsed dye laser, cryotherapy is safe and effective. Other topical treatment options include imiquimod and timolol. Lobular capillary haemangioma should not be confused with a true malignancy because it represents hyperplasia of vascular tissue in response to trauma.

CONCLUSION

The occurrence of a vascular tumour such as lobular capillary haemangioma from a vascular malformation such as a port-wine stain is an infrequently reported occurrence especially without any predisposing factors such as previous laser removal of the port-wine stain, trauma or pregnancy and we have reported one such case without any such predisposing factors.

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