

Dermato-venereological Quiz

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A 78-year-old gentleman presented with a three-month history of a reddish skin lesion over the base of his right thumb (Figure 1). There was contact bleeding and the size increased gradually. On examination, there was a 1 x 0.8 cm rubbery dusky nodule over base of right thumb. An excisional skin biopsy was performed and histology was shown in Figure 2.

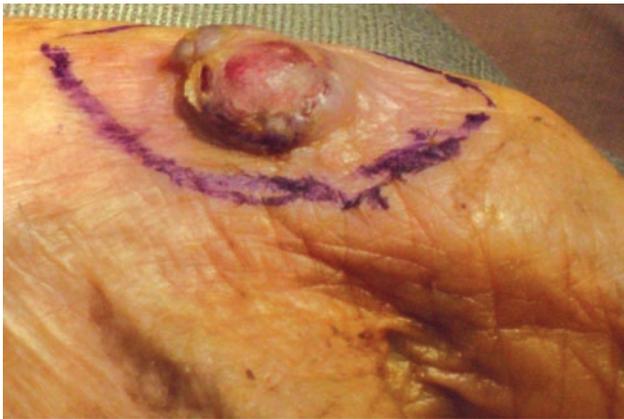


Figure 1. A rubbery dusky nodule over base of right thumb.

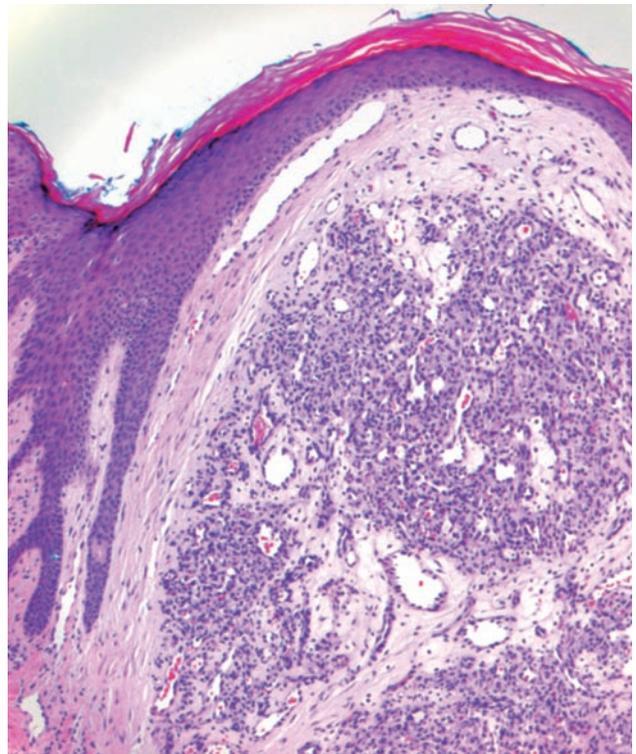


Figure 2. Proliferating capillaries grouped into lobules separated by dense fibrous bands. (H&E, low power view)

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Questions

- 1) What is the diagnosis?
- 2) What are the differential diagnoses?
- 3) What are the possible causes?
- 4) What are the complications that can occur with the condition?
- 5) What are the available treatment modalities?

(Answers on page 220)

Answers to Dermato-venereological Quiz on page 211

- 1) The diagnosis is lobular capillary haemangioma. It was also known as pyogenic granuloma which is a misnomer as the condition is neither infectious nor granulomatous. This condition is benign and usually solitary. It is a vascular proliferation.
- 2) Differential diagnoses include malignant conditions like amelanotic melanoma, basal cell carcinoma, squamous cell carcinoma and angiosarcoma, and infective condition, bacillary angiomatosis.
- 3) The exact pathogenesis of pyogenic granuloma remains unclear. Suggested potential risk factors include pregnancy, oral contraceptive pills, bacterial infections, microscopic arteriovenous anastomoses, and angiogenic growth factors, but the evidence is inadequate to support any of these as the primary causes. There was only 7% of cases shown to have history of trauma before the development of the lesion in a large pediatric series.¹
- 4) The possible complications include bleeding from the lesions, scarring and recurrence after treatment.
- 5) For solitary lesions, shave excision with electrocautery under local anesthesia can be performed. For large or recurrent lesions, surgical excision with primary closure will be more effective. One study showed a 43.5% recurrence rate in 23 lesions treated by shave excision and cautery or cautery alone.¹ Lesions treated by full thickness skin excision and linear closure did not recur. Treatment with pulsed-dyed laser at vascular-specific 585 nm is very selective, produces excellent cosmetic results.^{2,3} It can be used for intraoral lesions, as observed in pregnant women. However, treatment is usually not necessary during pregnancy as it generally resolves with delivery.

References

1. Patrice SJ, Wiss K, Mulliken JB. Pyogenic granuloma (lobular capillary hemangioma): a clinicopathologic study of 178 cases. *Pediatr Dermatol* 1991;8:267-76.
2. Tay YK, Weston WL, Morelli JG. Treatment of pyogenic granuloma in children with the flashlamp-pumped pulsed dye laser. *Pediatrics* 1997;99:368-70.
3. Khandpur S, Sharma VK. Successful treatment of multiple gingival pyogenic granulomas with pulsed-dye laser. *Indian J Dermatol Venereol Leprol* 2008;74:275-7.