

## QUIZ SECTION

### Solitary Nodule on the Nose: A Quiz

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A 14-year-old Japanese girl was referred to our hospital with a one-year history of a nodule on the nose. Physical examination revealed a dome-shaped, rubber-like in consistency, pink nodule 5 mm in diameter (Fig. 1a). There was no history of trauma preceding development of the nodule.

She did not report any symptoms. Dermoscopic examination revealed an homogenous white structure with peripheral telangiectasia (Fig. 1b). Histopathological features of the biopsy specimen are shown in Fig. 1c.

*What is your diagnosis? See next page for answer.*

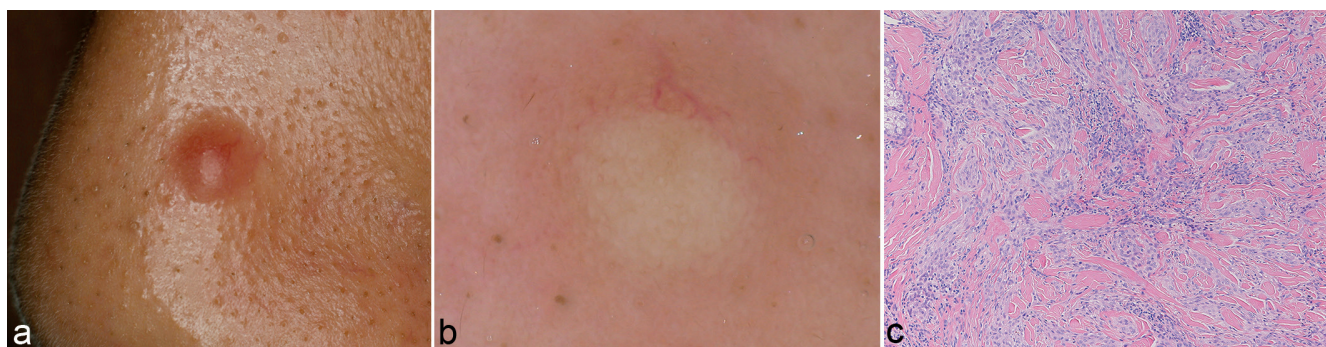


Fig. 1. (a) A pink nodule on the nose. (b) Dermoscopy: an homogenous white structure and peripheral telangiectasia. (c) Histopathology: (H&E staining,  $\times 40$ ). doi: 10.2340/00015555-1480

## ANSWERS TO QUIZ

### Solitary Nodule on the Nose: Comment

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#### **Diagnosis: Glomus tumour**

Histopathological examination revealed an intradermal tumour with multiple nodular or cord-like nests of round-to-oval epithelioid cells and stromal myxoid change. The epithelioid cells had a pale eosinophilic cytoplasm and central nuclei without atypia and partially showed perivascular distribution. Immunohistochemically, tumour cells were positive for vimentin and D2-40, partly positive for alpha smooth muscle actin, and negative for CD34, AE1/AE3, EMA, S-100 protein, HMB45, Melan-A and CD68.

Glomus tumours are relatively rare benign neoplasms that arise from normal glomus cells. The tumours constitute approximately 1.6% of all soft tissue tumours (1). Glomus bodies are present in the reticular dermis throughout the body, but are highly concentrated in the tips of digits, especially under the nails. Glomus tumours occur most frequently on the extremities, mainly in the subungual areas of digits. The tumours are composed of glomus cells, blood vessels and smooth muscle cells (2). Glomus tumours tend to be solitary, deep blue to purple in colour, and accompanied by a classic triad of pain, point tenderness, and cold sensitivity. The specific clinical features of digital glomus tumours, such as their location and the presence of pain, enable a diagnosis to be made clinically.

Although glomus tumours usually arise on digits, the tumours can occur as extradigital tumours. It is more difficult to diagnose extradigital glomus tumours. According to previous studies on extradigital glomus tumours (1, 3), most occur on the upper extremity, followed by the lower extremity and trunk. Occurrence on the nose is extremely rare.

Extradigital glomus tumours differ in some clinical features from digital ones. Patients with extradigital glomus tumours are older than those with digital glomus tumours (3). While there is an equal sex incidence of all glomus tumours, extradigital glomus tumours are found more commonly in males (1, 3). Symptoms such as pain and hypersensitivity to cold are less frequently observed in patients with extradigital glomus tumours, leading to misdiagnosis.

Dermoscopic findings of a glomus tumour have rarely been reported (4, 5). However, typical features are not clear. In our patient, a homogenous white structure was observed. It is likely that a homogenous white structure reflects an increasing amount of collagen bundle.

In conclusion, we report here a case of a glomus tumour on the nose. The occurrence of glomus tumours in extradigital locations provides a great diagnostic challenge.

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