

QUIZ SECTION

A Crescent-shaped Nodule in the Temple: A Quiz

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A 32-year-old Korean woman presented to our clinic with a solitary crescent-shaped protruding nodule on the right temporal area (Fig. 1). Approximately one year previously, a single tiny papule that had not been associated with trauma had suddenly increased in size to a 2 × 1 cm, protruding, crescent-shaped nodule. At that time, the patient was pregnant and refused treatment; however, she returned to the clinic after giving birth. In the intervening period, the size and shape of the nodule had not changed.

Histopathological examination showed a poorly circumscribed mass in the lower dermis, and subcutaneous fat, infiltrating into the muscular structure (Fig. 2a). Cellular

atypia was not prominent. Abundant fibrous tissue and mild infiltration of inflammatory cells were also noted. Dermal collagen bundles were densely packed. Immunohistochemical analysis showed that spindle-shaped cells were positive for smooth muscle actin (Fig. 2b), but negative for CD34, CD31, factor XIII and factor VIII.

What is your diagnosis? See next page for answer.



Fig. 1. Solitary crescent-shaped protruding nodule in the right temporal area.

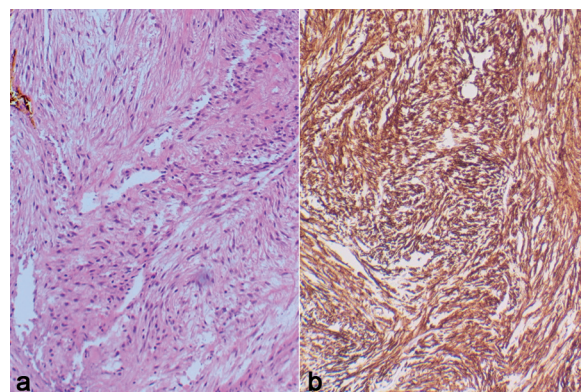


Fig. 2. Histologic examination revealed spindle-shaped plump cells deposited in the myxoid stroma (a). Immunohistochemical analysis showed that the cells were positive for smooth muscle actin (b).

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A Crescent-shaped Nodule in the Temple: Comment

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Diagnosis: Nodular fasciitis

Nodular fasciitis (NF) was first reported as subcutaneous pseudosarcomatous fibromatosis by Konwaler et al. in 1955 (1). The term “pseudosarcomatous” was chosen owing to its rapid growth, high cellularity, frequent mitoses and infiltrative border.

Clinically, NF usually occurs in young adults as a subcutaneous or deep soft-tissue mass and grows rapidly (2, 3). Although the extremities are most commonly involved, it is estimated that 10–20% of cases involve the head and neck region (1, 3).

Most cases of intradermal fasciitis occur in the head and neck region (4, 5). Meffert et al. (6) highlighted that in the head and neck region, the fascial musculature is directly attached to relatively thin skin through the superficial musculoaponeurotic system. The temporal area is the region of the face with the thinnest skin; therefore, rapid growth of NF in this area may raise the skin.

NF on the face should be differentiated from facial dermatofibroma, dermatofibrosarcoma protuberance, or

atypical fibroxanthoma. Histopathological features, such as the fibrillar character of tumour cells with smooth muscle actin, and abundant dermal mucin might be diagnostic indicators of NF.

NF follows a self-limiting course and recurrence is uncommon; hence a wide excision should be avoided.

REFERENCES

1. Konwaler BE, Keasbey L, Kaplan L. Subcutaneous pseudosarcomatous fibromatosis (fasciitis). *Am J Clin Pathol* 1955; 25: 241–252.
2. Zuber TJ, Finley JL. Nodular fasciitis. *South Med J* 1994; 87: 842–844.
3. Lee MW, Choi JH, Sung KJ, Moon KC, Koh JK. Nodular fasciitis, review of 16 cases. *Korean J Dermatol* 2001; 39: 1–6.
4. Thompson LD, Fanburg-Smith JC, Wenig BM. Nodular fasciitis of the external ear region: a clinicopathologic study of 50 cases. *Ann Diagn Pathol* 2001; 5: 191–198.
5. Lai FM, Lam WY. Nodular fasciitis of the dermis. *J Cutan Pathol* 1993; 20: 66–69.
6. Meffert JJ, Kennard CD, Davis TL, Quinn BD. Intradermal nodular fasciitis presenting as an eyelid mass. *Int J Dermatol* 1996; 35: 548–552.