Nodular fasciitis at the base of penis in a four year old boy

Paras R. Kothari, Gowri Shankar, Arun Gupta, Anurag Rastogi, Bharati Kulkarni
Department of Paediatric Surgery, L.T.M. Medical College and General Hospital, Sion, Bombay - 400022, India

For correspondence:
Paras R. Kothari, Dept. of Pediatric Surgery, L.T.M. Medical College and General, Hospital, Sion, Mumbai - 400022, India
E-mail: drparaskothari@rediffmail.com

ABSTRACT

Nodular fasciitis (NF) is a relatively common soft tissue lesion and represents a rapidly growing benign reactive process. Their cause is unknown. Less than 20% occur in children. Lesions in the head and neck region develop more frequently in children than in adults. NF has been reported at various atypical sites. We report a case of nodular fasciitis at the base of the penis in a 4-year-old boy. The nodule was excised with a narrow margin. This is the first reported case of nodular fasciitis at this unusual site.

Key Words: Nodular fasciitis, Paediatric, Penile

INTRODUCTION

Nodular fasciitis (NF) is a benign, discrete, fibroblastic proliferation in soft tissue. The condition is most commonly encountered in middle-aged people in the upper extremities. In children the head and neck region is most commonly involved. It is the most common benign mesenchymal tumour that may mimic malignancy clinically and histologically. It is frequently misdiagnosed as sarcoma due to its rapid growth and deceptive appearance. It is thus important to recognize this condition so as to avoid aggressive treatment.

CASE REPORT

A 4-year-old boy presented with complaints of a rapidly growing subcutaneous nodule at the base of the penis since one month. There was no history of trauma, surgery and urinary complaints. No history of similar lesions on the other parts of the body was present.

The general examination and vitals were essentially normal. Complete blood count and urine routine microscopy were within normal limits.

On local examination, a 2 x 2 cm firm, minimally painful subcutaneous nodule was present on the right side of the base of the penis (Figure 1).

Excision of the nodule with a narrow margin was done.

Figure 1: Subcutaneous nodule present on the right side of the base of the penis
Histopathology confirmed the swelling as nodular fasciitis.

**DISCUSSION**

NF is a relatively common soft tissue lesion and represents a benign reactive process.

It is a benign, discrete, fibroblastic proliferation in soft tissue that is frequently misdiagnosed as sarcoma due to its rapid growth and deceptive appearance.²

Most of the patients are middle-aged with the upper extremity being the commonest site of involvement. Lesions in the head and neck region develop more frequently in children and infants than in adults.¹

NF have been reported in the nasal cavity,² oral cavity,³ parotid,⁴ vulvar⁵ and breast⁶ region. Involvement of the penis has not been reported yet. This is the first report of NF at this unusual site—base of the penis.

Clinicians should include NF in the differential diagnosis of rapidly growing subcutaneous tumours and not rush to overly aggressive therapy.

Histologically, these nodules are composed of proliferating immature fibroblasts in short, irregular bundles. These fibroblasts vary from thin, elongated and spindle-shaped with elongated nuclei to plump with one or more large, oval nuclei. Hypercellularity, brisk mitotic rate and the presence of actin cause it to mimic a myogenic sarcoma. Microscopic examination of NF exhibited cohesive clusters of epithelioid to spindle-shaped cells in a background of intact mesenchymal cells, inflammatory cells and myxoid stroma.

It is a benign condition that may mimic malignancy clinically and histologically. It is thus important to recognize this condition so as to avoid aggressive treatment.

**REFERENCES**