

A Childhood Case of Solitary Intrascrotal and Extratesticular Neurofibroma

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INTRODUCTION

Neurofibroma is a common benign tumor composed of neuromesenchymal tissue with residual nerve axons, which results from an abnormal overgrowth of Schwann cells. They can be present anywhere on the body but it is rarely localized in scrotum.⁽¹⁾ They are usually skin-colored, soft or rubbery, nodular lesions, which may be pedunculated. It can be solitary lesions or multiple, and the multiple neurofibromas are usually classified as neurofibromatosis.⁽²⁾ The diagnosis is usually confirm with histological examination.⁽³⁾ This case is a 2 year-old patient who is the youngest case of the solitary intrascrotal and extratesticular neurofibroma has been reported in the English literatures, so far.

CASE REPORT

A 2 year-old boy with a history of gradually enlarging painless mass in his left hemiscrotum since last year, referred to our hospital. There was no history of trauma and no familial history of von Recklinghausen neurofibromatosis (**Figure 1**). In physical examination the mass was soft, non-tender without transillumination. Both testes were in the scrotum and normal in size. There wasn't any evidence of inguinal lymphadenopathy. Patient's skin was normal and there was not any sign of classic neurofibromatosis in physical examination. Serum alpha fetoprotein, beta human chorionic gonadotropin and lactic dehydrogenase were in normal range. Ultrasonography demonstrated a soft tissue, measuring 4 cm × 6 cm located in the left hemiscrotum. It was solid, hypoecho with fatty pattern. Left testis was in normal size. Since there was not any evidence of intratesticular malignancy in physical examination and diagnostic tests including sonography and laboratory tests the patient was operated under general anesthesia through a scrotal incision (**Figure 2**). The mass was completely excisable without any capsule and the tissue had low vascularity; left testis was normal and tunica albuginea was intact.

The pathology was neurofibroma and fragments of fibro-fatty tissue with no tumoral involvement; no evidence of atypia or mitosis was present and composed of uniformly distributed spindle cells with wavy nuclei. The postoperative period was uneventful with no recurrence after 6 months of follow up (**Figure 3**).

DISCUSSION

Only 10 cases of solitary neurofibroma of scrotum (not in the neurofibromatosis 1 complex) have been reported so far;^(4,5) which just 2 of them were in childhood and our case was the youngest of them.

All of the reported cases in this area were extratesticular. As a rule, these tumors are not encapsulated and have soft consistency. Microscopically, neurofibromas are formed by mixed proliferation of Schwann's cells (usually are



Figure 1. The appearance of the tumor before surgery.

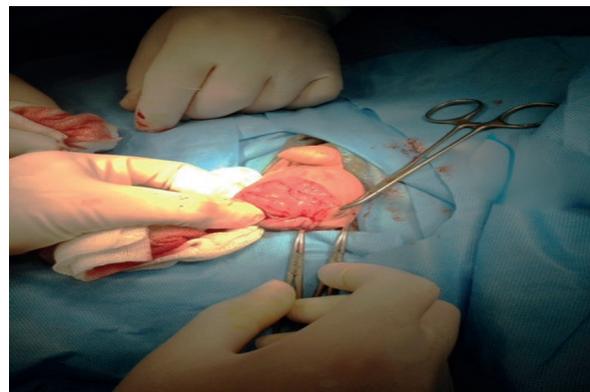


Figure 2. Intraoperative appearance.

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Figure 3. Appearance of scrotum 6 months postoperatively.

the most cellular elements in the tumor), fibroblasts and perineural cells.⁽¹⁾

The reported cases are in wide range of age (8-77 years) and size.⁽⁵⁾ Most of the cases were a painless swelling mass in left hemiscrotum. In all of the reported cases, the tumor had good prognosis, and its complete excision has yielded good results with no recurrence.⁽³⁾ In most of the reported cases, like ours, the exact origin of the tumor was unknown.⁽⁶⁾ Although, we know that the testis, vas-deferens and epididymis were intact.

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