Case Report
Received: May 18, 1993
Accepted: November 26, 1993

Urol Int 1994;52:231-232

Paratesticular Myxoma

K. Kazuhiro Yoshimura
H. Hitoshi Inoue
T. Takuo Koide
S. Shunzo Ohnishi

Department of Urology, Ikeda Municipal Hospital and the Department of Pathology, College of Biomedical Technology, Osaka, Japan

Key Words
Paratesticular neoplasm
Myxoma

Abstract
We report a case of paratesticular myxoma. These tumors, which arise from mesenchymal tissues, occur in a variety of sites, the most common being subcutaneous tissues and skeletal muscles but they rarely have been reported to originate in the paratesticular region. The differential diagnosis of other mesenchymal neoplasms of the paratesticular area is discussed.

Kazuhiro Yoshimura, MD, Department of Urology, Ikeda Municipal Hospital, 3-5-1, Johnan, Ikeda-shi, Osaka 563 (Japan)

Introduction
Myxomas are benign mesenchymal tumors that occur in a variety of sites, especially in the subcutaneous tissues and skeletal muscles. Myxomas of the genitourinary tract have been described sporadically [1,2] but scarcely has paratesticular myxoma been reported in the literature. This rare benign condition should be considered in the differential diagnosis of other mesenchymal neoplasms, such as rhabdomyosarcoma, liposarcoma and neurofibroma. Herein we report a case of paratesticular myxoma arising from the mesenchymal tissue of the gonad.

Case Report
A 49-year-old man complained of a left scrotal mass that had been palpable for a few years. No history of scrotal trauma, voiding difficulty or other genitourinary diseases was elicited. There was no weight loss, evidence of systemic illness or history of hereditary or familial diseases. On physical examination the left scrotum was occupied by a hard, elastic, nontender, nontransilluminated mass adjacent to the upper pole of the left testicle. Laboratory data including blood count, urinalysis, urea nitrogen, liver function tests, serum α-fetoprotein levels and serum ß-human chorionic gonadotropin levels were normal. A chest roentgenogram and abdominal CT scan were negative. An excretory urogram revealed prompt bilateral function. Scrotal ultrasound demonstrated a large rounded mass in the anterosuperior aspect of the left testicle without definite separation from the testicle. The clinical impression was a primary testicular tumor arising from the upper pole of the left testicle. A left radical orchiectomy was performed.

Grossly, the ovoid tumor was encapsulated and measured 3.5 cm in diameter consisting of pale-yellow gelatinous tissue (fig. 1). The microscopic examination revealed a uniform cellular population of
Fig. 1. Grossly, tumor was encapsulated and contained gelatinous tissue.

Fig. 2. Photomicrograph of tumor tissue showing a uniform cellular appearance of spindled or stellate cells with round to oval nuclei dispersed in a myxomatous substance. Spindled or stellate cells dispersed in an Alcian blue-positive myxoid background. The cells had uniformly small round to oval nuclei with fine, even chromatin. There was scant eosinophilic cytoplasm. No mitotic activities were identified (fig. 2).

Special staining of the myxoid component by antibodies to des-min and S-100 protein was negative, whereas staining with vimentin was positive. A histopathological diagnosis of paratesticular myxoma was made.

True myxomatous tissue is present only in the developing fetus and does not exist in adults. The term of myxoma was first introduced by Virchow in 1863 to describe tumors that reproduced the substance of the umbilical cord and contained mucin in their intercellular substance. Stout [3] proposed the criteria for the histopathological diagnosis of myxoma in 1948. Myxomas are extremely rare neoplasms encountered virtually only in adults and principally within skeletal muscle and in subcutaneous tissues [4, 5]. They seldom occur in the genitourinary tract or in the gonadal component. To our knowledge only 4 cases of paratesticular myxoma have been reported in the literature [6–9].

The histopathological diagnosis of myxomas is often difficult. Histologically these neoplasms must be differentiated from myxoid changes occurring in liposarcomas, chondrosarcomas, botryoid-type rhabdomyosarcomas and fibrosarcomas. Myxoid liposarcomas, chondrosarcomas and botryoid-type rhabdomyosarcomas all show a greater degree of pleomorphism and contain specific cellular elements of lipoblasts, chondroblasts or rhabdomyo-blasts. Myxoid neurofibrosarcomas that usually develop in the deep mesenchymal tissue are positive for S-100 protein by immunocytochemistry, whereas myxomas are negative. The mucoid substance in chondrosarcomas is resistant to depolymerization with hyaluronidase digestion. As malignant myxoid neoplasms of the paratesticular region are more common than benign ones, myxomas are
an important entity to be considered in the differential diagnosis of paratesticular tumors. Simple excision of myxomas is usually an adequate therapy but, rarely, recurrence may follow.

References

Y. Yoshimura/Inoue/Koide/Ohnishi
Paratesticular Myxoma