



Clinical Report

Peritesticular Fibromyxoma in a Donkey

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Abstract

Case Description- A seven-year-old male donkey was admitted with a history of left scrotal swelling with ulcerating wound since 2 years.

Clinical Findings- The left scrotum was painful. There was ulcerating and hypergranulating wound discharging bloody discharge. The wall of the scrotum was found thick and infiltrated with soft slimy non capsulated and lobulated fibrous tissue masses. The left testis was found small and atrophied. Pathological studies showed the focal areas of myxomatus degeneration with spindle shaped and stillate connective tissue cells. The epithelium of seminiferous tubules of left testis appeared denuded with loss of spermatocytes. In addition some tubules appeared collapsed and have wave like hyaline thickened.

Treatment and outcome- Surgical castration was done. Daily excercise and systemic antibiotics were recommended. The animal showed recovery within 15 days without recurrent.

Clinical Relevance- Peritesticular fibromyxoma should be considered in the diagnosis and treatment of scrotal swelling in the equines. Surgical castration was suceful in the treatment without recurrency.

Key words- Fibromyxoma , Scrotum, Testis, Donkey

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Case Description and Clinical Findings

A seven-year-old male donkey was admitted to Surgery clinic, Faculty of Veterinary Medicine, Cairo University with a history of unilateral left scrotal swelling with rounded ulcerating and granulating wound at the anterior surface of the scrotum since 2 years.

Clinical examination revealed the left scrotum was soft painful swelling. There was ulcerating hypergranulating wound discharging bloody discharge. Body temperature was 39.5 °C. The animal lost body weight and appetite. Systemic antibiotics (penicillin-streptomycin) was given for successive 5 days.

Treatment and Outcome

Castration was performed under the effects of Xylazine Hcl (1.1 mg/kg.bwt) and Ketamine Hcl (2.2 mg/kg.bwt.) by slow intravenous administration. The animal was secured on left lateral recumbancy. Left scrotum Skin incision was made. The wall of the scrotum was found thick and infiltrated with soft slimy, non capsulated and lobulated fibrous tissue masses. Blunt dissection was continued deep to separate the left testis and spermatic cord. Castration was performed as usual. The excised masses of neoplasms and left testis were fixed in 10% formol saline for histopathology. Post operative care included streptopenicillin 3 million IU. was given intramuscularly for 5 days and antitetanic serum (1500 IU.) subcutaneously Exercise was performed daily for half an hour to enhance escape of discharge. The animal recovered completely within 15 days. No recurrence was observed after one year post surgery.

The fibrous lobulated mass was loosely attached and infiltrated to the scrotal wall. The excised mass weighted about 750 gm. The mass was slimy and white lobulated on cut section. The left testis was small and atrophied (Fig.1).

Microscopically the neoplasm consisted of interlacing bundles of adult well differentiated spindle shaped connective tissue cells arranged in whorled patterns (Fig.2). Focal areas of myxomatus degeneration were seen with spindle shaped and stellate connective tissue cells, having long branching fibrils (Fig.3). The pathological changes in the left testis displayed the epithelium of seminiferous tubules denuded to the basement membranes with loss of spermatocytes. Some tubules appeared collapsed and have wave like hyaline thickened basement membrane with intertubular oedema (Fig.4).

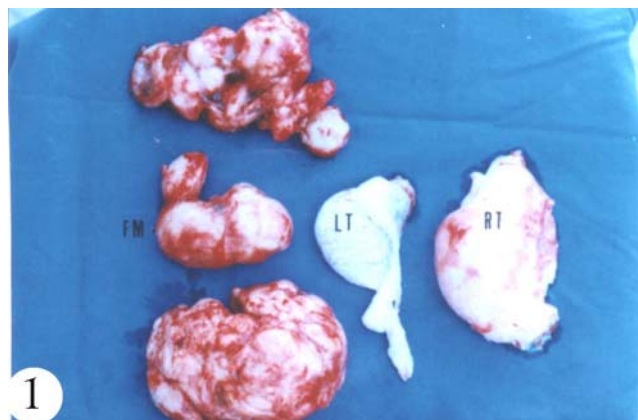


Figure 1. The excised fibromyxoma (FM) atrophied left testis (LT) and normal right testis (RT).

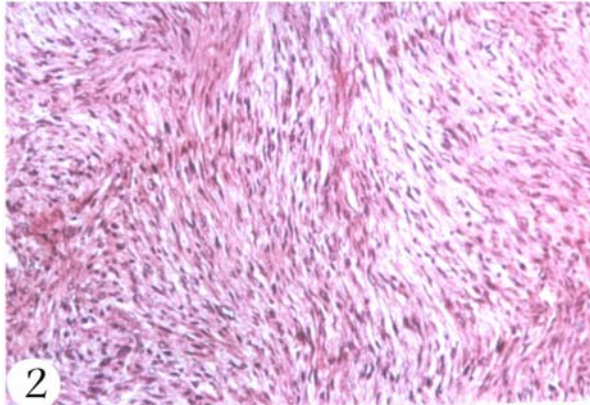


Figure 2. Peri testicular fibroma showing interlacing bundles of closely packed spindle shaped fibroblasts. Notice the whorled patterns. (H&E, X200).

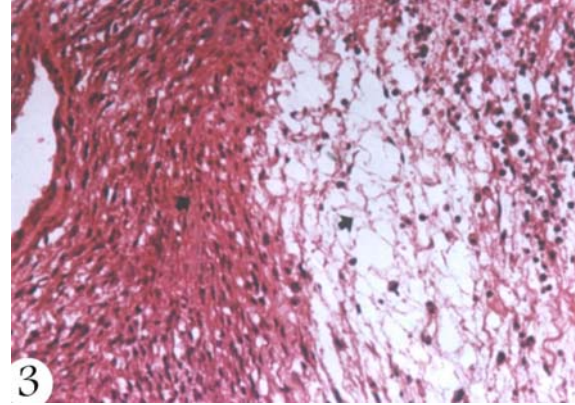


Figure 3. Fibromyxoma showing myxomatous degeneration of fibrous connective tissue. Notice the spindle shaped cells with long branching fibrils (arrows). H&E X200.

Discussion

Fibroma, myxoma, and fibromyxoma are the most frequent neoplasms in the dermis and subcutis in the skin of the lower legs in equine (1). Neoplasms of the scrotal skin are much less common (2). The incidence of fibromyxoma of male reproductive tract are very low about 1% (3). Melanomas and hemangiomas in the dog and papillomas in the boar are the occasionally reported neoplasm in the scrotal skin (2). The scrotal fibromyxoma associated with degeneration of the surrounding testis are unusual.

Fibromyxoma have been reported in the teat of the camel (4) and in the posterior aspect of the metatarsus in the leg of the horse (5).

They attributed fibromyxoma to chronic irritation and nutritional deficiency. It seems that, this condition could be attributed to chronic irritation of scrotal wound leading to infiltration of scrotal tissues with soft slimy non-capsulated fibrous tissue. The same grossly lesion have been reported by (1).

Degeneration of the left testis was reported both grossly and microscopically, the Seminiferous tubules appeared denuded to the basement membrane, collapsed and have cell debris associated with intertubular oedema. Moreover, Acland (6) mentioned that, testicular degeneration was attributed obstruction of the flow of the sperm, fever or local heat from inflammation. Therefore, in this study, scrotal fibromyxoma plays an important role in the degeneration of the corresponding testis was seen. As well as scrotal fibromyxoma should be considered in the diagnosis of such conditions.

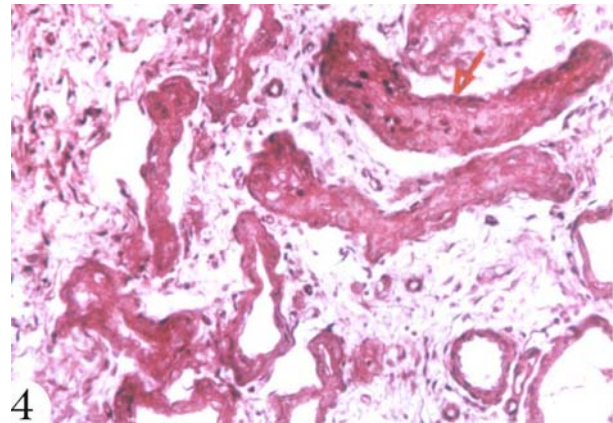


Figure 4. The affected left testis showing degenerated and collapsed seminiferous tubules and inter tubular oedema. Notice wave like hyaline thickening of the basement membrane of the seminiferous tubules (Arrow) H&E X200.

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فیبرومیگسومای اطراف بیضه در یک رأس الاغ

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توصیف بیمار - یک رأس الاغ نر هفت ساله با سابقه تورم و زخم در کیسه بیضه چپ به مدت ۲ سال به کلینیک ارجاع گردید. یافته های بالینی - بیضه چپ دردناک بود. زخیم شدگی دیواره کیسه بیضه همراه با نفوذ توده های بافت فیبروزه لوبوله و فاقد کپسول مشاهده گردید. بیضه چپ کوچک و دچار آتروفی بود. در مطالعه آسیب شناسی نقاط دژنرسانس میکسومایی همراه با سلول های دوکی و ستاره ای شکل بافت پیوندی مشاهده گردید. بافت پوششی لوله های منی ساز بیضه چپ فاقد هسته و اسپرمتوسیت ها بودند. برخی از لوله ها کلاپس شده و با مواد مواج شبیه هیالین پر شده بودند. درمان و نتیجه آن - حیوان اخته گردید. تمرین بدنی و تجویز روزانه آنتی بیوتیک پیشنهاد شد. پس از ۱۵ روز حیوان بهبود یافت. کاربرد بالینی - فیبرومیگسوما باید به عنوان یکی از عوامل تورم بیضه در اسب و الاغ در مواجهه با چنین مواردی مورد توجه قرار گیرد. اخته کردن روش مناسبی در درمان است که در این مورد عود بیماری نیز مشاهده نگردید. کلید واژگان - فیبرومیگسوما، بیضه، کیسه بیضه، الاغ.

