Myxoma in a Terrier Dog: a Case Report

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Abstract

Case Description- A seven-year-old female terrier dog with a large mass in the posterior aspect of the right thigh was referred to the Veterinary Clinic of Shahid Bahonar University of Kerman.

Clinical Findings- The hyperpigmented mass without any sign of inflammation, pain and redness was seen at the right thigh.

Treatment and Outcome- The abnormal mass was removed surgically. Histopathologic examinations confirmed the occurrence of myxoma.

Clinical Relevance - Myxoma is a rare tumor in domestic animals especially dog and surgical treatment is the choice.

Key Words - Myxoma, Thigh, Dog

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Case Description

A seven-year-old female terrier dog with an abnormal mass in posterior aspect of the right thigh was referred to Veterinary Clinic of Shahid Bahonar University of Kerman. In physical examination, an abnormal mass, $18 \times 7$ cm in size, was seen which extended from right margin of vulva to the ground. No sign of hemorrhage, ulceration, inflammation, pain and redness was seen in this hyperpigmented mass. The mass was fluctuate (fig.1). There was no similar lesion in other parts of the body.

![Fig.1: Subcutaneous myxoma of the posterior aspect of the right thigh in a dog. Note the translucent bulging cut surface.](image)

Treatment and Outcome

The animal was induced by thiopental-Na 2.5% and maintained with halothane and O2 combination. The mass, $18 \times 7 \times 4$ cm in size, was removed en bloc following surgical preparation. Cephazoline (20 mg/kg/im, Jaberebne Hayyan laboratory, Iran) was administered every 12 hours for 5 days.

Macroscopically, the mass was sharply circumscribed with a white gelatinous and slimy cut surface. Histopathologic examination revealed that the tumor composed of connective tissue formed mucin, in other words, connective tissue of embryonic type. The nuclei appeared round or stellate. The intercellular spiral and slender fibrils were white-bluish and showed little parallelism. Ground substance which made the main volume of the tumor observed as glossy, colorless material (fig.2). These findings were similar to other reports, and histopathologic examinations confirmed the occurrence of myxoma. The tumor has not recurred till the time of this case report.
Fig. 2: Scanty, delicate, spindle – shaped or stellate fibroblasts are separated by ground substance rich in mucopolysaccharide and poor in both collagen and blood vessels. 400 x, H & E.

Discussion

Myxoma is a fibroma in which the neoplastic cells have stellate morphology of primitive mesenchymal cells. Mucin in the intercellular matrix is the chief feature that distinguishes myxoma from fibroma. This tumor can occur in a variety of locations including the heart, bones, skin, subcutaneous and aponeurotic tissue, genitourinary tract, skeletal muscle, lung, spleen, spinal canal and liver. Although tumors that arise from spindle-shaped cells of the dermis and subcutis are common in dogs and cats, myxoma is extremely rare in these species. Myxoma of the joints are extremely rare in domestic animals. In a retrospective study, it was shown that six (17.1%) of 35 cases with canine synovial tumor were synovial myxoma. Cardiac myxoma is extremely rare in animals including dogs. Macroscopically, neoplasm is reported to be glossy, soft to firm, slimy and in the color of pale gray-white. There are no mitotic figures, cellular or nuclear pleomorphism in myxoma. There are hypercellular or pleomorphic areas and mitosis in myosarcoma versus myxoma.

References

چکیده:
وقوع میکسوما در ناحیه پشتی ران یک قلاده سگ تریب

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بخش بیماری‌های داخلی حیوانات کوجک دانشگاه علوم تخصصی دامپزشکی، دانشگاه آزاد اسلامی، واحد علوم و تحقیقات، تهران، ایران

توصیف بیمار و یافته‌های بالینی: پک قلاده سگ تریب ماده ۷ ساله با یک برجستگی در قسمت پشتی ران راست به کلینیک دامپزشکی دانشگاه شهید باهنر کرمان ارجاع داده شد. توده‌ای بزرگ به‌ویژه بدون هیچ نشانه‌ای از التهاب درد و قرمزی در این قسمت مشاهده گردید.

درمان و نتیجه‌آن: با توجه به وضعیت خوب حیوان، توده‌ای نیز آنتی‌بیوتیک برداشتند و سفارش ۲۰ mg/kg/IM (۱۲ هر ساعت یک بار به‌مدت ۵ روز تجویز کردند. نتایج های عیان استوپ‌پلتیولوژیک، وجود میکسوما را تایید نمودند.

کاربرد بالینی: میکسوما توموری نادر در حیوانات اهلی خصوصا سگ است که به درمان جراحی پاسخ می‌دهد.

کلید واژگان: میکسوما، سگ