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Clinical Report

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. Histopathlogic 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 × 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.

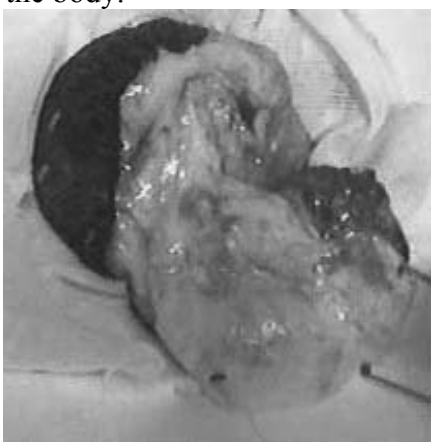

Fig.1: Subcutaneous myxoma of the posterior aspect of the right thigh in a dog. Note the translucent bulging cut surface.

Treatment and Outcome

The animal was induced by thiopental-Na 2.5% and maintained with halothane and O2 combination. The mass,18 × 7 × 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 interacellular 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 occurense 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[1]. 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[2]. Although tumors that arise from spindle-shaped cells of the dermis and subcutis are common in dogs and cats[1], myxoma is extremely rare in these species[2]. Myxoma of the joints are extremely rare in domestic animals[3]. In a retrospective study, it was shown that six (17/1%) of 35 cases with canine synovial tumor were synovial myxoma[4]. Cardiac myxoma is extremely rare in animals including dogs[5,6]. Macroscopically, neoplasm is reported to be glossy, soft to firm, slimy and in the color of pale gray-white[2].
There are no mitotic figures, cellular or nuclear pleomorphism in myxoma. There are hypercellular or pleomorphic areas and mitosis in myosarcoma versus myxoma[2].

References

1. Yager Julie.A, Scott Danny.W. In : Jubb K.V.F, Kennedy L.P, Palmer N, eds. *Pathology of domestic animals*. 3rd ed. Vol. 1. California: Academic Press Inc, 1985;516.
2. Yaman I, Durgun T, Karabulut E. Case report of a myxoma in a gamecock. *Vet Med* 2004;49:268 -270.
3. Berrocal A, Millan Y, Ordas J, et al. A joint myxoma in a dog. *J Comp Pathology* 2001;124:223–6.
4. Craig LE, Julian ME, Ferracone JD. The Diagnosis and prognosis of synovial tumors in dogs:35 cases. *Vet Patholo*gy 2002;39:60–73.
5. Briggs OM, Kirberger RM, Goldberg NB. Right atrial myxosarcoma in a dog. *J S Afr Vet Assoc* 1997;68:144–146.
6. Machida N, Hoshi K, Kobayashi M, etal, Cardiac myxoma of the tricuspid valve in a dog, *J Comp Pathology* 2003;129:320–324.

چکیده:

وقوع میکسوما در ناحیه پشتی ران یک فلاده سگ ترییر

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توصیف بیمار و یافته های بالینی: یک قلاده سگ ترییر ماده ۷ ساله با یک برجستگی در قسمت پشتی ران راست به کلینیک دامپزشکی دانشگاه شهید باهنر کرمان ارجاع داده شد. توده ای پررنگ بدون هیچ نشانه ای از التهاب، درد و قرمزی در این قسمت مشاهده گردید.
درمان و نتیجه آن: با توجه به وضعیت خوب حیوان، توده غیر طبیعی بوسیله جراحی برداشته شد. سفازولین (۲۰ mg/kg/IM) هر ۱۲ ساعت یک بار به مدت ۵ روز تجویز گردید. یافته های هیستوپاتولوژیک، وجود میکسوما را تایید نمودند.
کاربرد بالینی: میکسوما توموری نادر در حیوانات اهلی خصوصا سگ است که به درمان جراحی پاسخ می دهد.
کلید واژگان: میکسوما، ران، سگ