

What is Your Diagnosis?

Chutimon Thanaboonnipat Nan Choisunirachon

Signalment

A three-kilogram, 14 year-old, intact male, Pomeranian dog.

History

The patient was showed up to the Small Animal Teaching Hospital, Chulalongkorn University due to the requests for dental scaling and a soft tissue lump at the right inguinal area.

Clinical examination

After physical examination, in addition to

general appearance which the results indicated normal condition; for example: dehydration status, capillary refilling time, heart rate and heart sound, respiratory rate and respiratory sound, the marked deposition of dental tartar and right inguinal lump (4 x 2 cm) were detected. Moreover, the right testis was suspected to be in abnormal inguinal position.

Radiographic examination

Due to the soft tissue lump that was detected at the right inguinal area; abdominal radiographs were subjected for abdominal hernia assessment. Therefore, both of ventrodorsal and right lateral abdominal radiographs were obtained.

What is your diagnosis?
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Radiographic findings

After abdominal radiographs were obtained, the cone-shaped, smooth margin, soft tissue density mass which the maximal diameter was 4.7 x 2.9 cm (arrow) was detected at the pre-pubic area on the lateral abdominal radiograph (Fig. 1) without the discontinuation of the caudoventral abdominal wall. Besides, there was an enlarged, round shape, soft tissue

density, intra-pelvic mass that compressed the rectal dorsally (asterisk). On the ventrodorsal abdominal radiograph (Fig. 2), an elongated soft tissue opacity mass (3.3 x 1.5 cm, arrow) was detected on the right inguinal area. In addition to inguinal mass and intra-pelvic mass, the narrowing intervertebral disc spaces between L2 – L4 were detected.

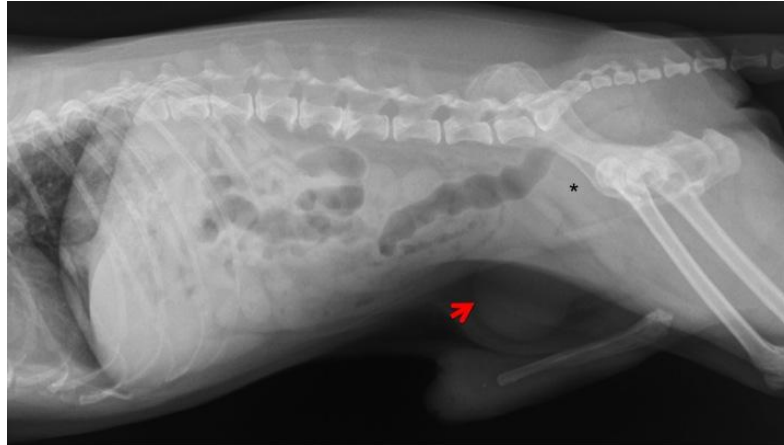


Figure 1 The right lateral abdominal radiograph unveiled that there was a soft tissue opacity, cone-shaped mass (4.7 x 2.9 cm, arrow) at the caudoventral inguinal area without the discontinuation of pre-pubic abdominal wall. In addition to the mass, prostate gland was moderately enlarged with round shape and smooth margin that dorsally compressed the rectum (asterisk). Moreover, the narrowing intervertebral disc spaces between the L2 – L4 were detected.



Figure 2 The ventrodorsal abdominal radiograph showed an elongated soft tissue opacity mass (3.3 x 1.5 cm, arrow) at the right inguinal area. Besides, the narrowing intervertebral disc spaces between L2 – L4 were detected.

Radiographic diagnosis

Right inguinal cryptorchid and testicular tumor.

Discussion

Cryptorchid, one of the most common canine genital abnormalities, could be found at the several locations such as inguinal area or intra-peritoneal cavity. Unless the abnormalities, the normal cryptorchid testicle would be difficult to be detected due to the smaller size than that of the scrotal testis. Cryptorchid testicle was reported to be one of the factor to cause the testicular neoplasia which the testicular tumor was an almost 14 times higher found in the cryptorchid testicles than those found in scrotal testes (Hayes and Pendergrass, 1976). Sertoli cell tumor has been reported to be a half incidence following by the seminoma that was accounted for one-third among concurrent testicular neoplasia found in canine cryptorchid (Hayes et al., 1985). In the case of inguinal cryptorchid neoplasia that was seen in this patient, inguinal hernia should be ruled out. Therefore, the history of the testicular position including abdominal palpation and abdominal radiograph would be benefit for observing the lump architecture and visualizing the abdominal wall.

Reference

- Hayes HM jr and Pendergrass TW 1976. Canine testicular tumors: epidemiologic features of 410 dogs. *Int J Cancer*. 18: 482 – 487.
- Hayes HM jr, Wilson GP, Pendergrass TW, Cox VS 1985. Canine cryptorchidism and subsequent testicular neoplasia: case-control study with epidemiologic update. *Teratology*. 32: 51 – 56.