Bilateral testicular tumours of mixed origin in a Kune Kune boar

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DESCRIPTION

A pet Kune Kune boar with an estimated age of 7 years old was presented with bilateral scrotal swelling.

The right testicle and left testicle measured approximately 15–20 cm and 8–10 cm in diameter, respectively, and both testes felt abnormally firm.

Ultrasound examination revealed soft tissue density with anechoic areas approximately 5 mm in diameter throughout; no normal testicular structure was evident.

Bilateral castration was performed using a closed technique with the boar anaesthetised.

Grossly, the cut surface of the right testicle was effaced by a multilobular to diffuse neoplastic proliferation, while the left testicle showed a small focal (1.5×1 cm) irregular whitish nodule (Fig 1). Histologically, the tissue from the right testis showed evidence of a diffuse, non-encapsulated neoplastic proliferation. The neoplastic cells were large and polygonal with eosinophilic cytoplasm and a large ovoid nucleus, consistent with a Leydig cell tumour (Fig 2). The tissue from the left testicle demonstrated a partially encapsulated proliferation. The neoplastic cells were elongated with small nuclei resembling Sertoli cells; they

FIG 1: The right testicle (a) is severely enlarged and the parenchyma is effaced by a multilobular to diffuse pale to orange neoplasia (arrows). The left testicle (b) shows a focal small (1.5×1 cm), irregularly shaped white parenchymal nodule (arrows)

FIG 2: The right testicular parenchyma (a) is effaced by a neoplastic proliferation of Leydig cells with multifocal scattered microhaemorrhages (arrows). The mitotic index is low with 1–2 mitoses per high power field. The left testicular parenchyma (b) is characterised by an intratubular proliferation of neoplastic Sertoli cells showing moderate features of atypia (arrows) and surrounded by abundant fibrovascular stroma. Haematoxylin and eosin; Ob. × 40. Bars: 100 μm
were confined within seminiferous tubules and displayed occasional mitoses and surrounded by abundant fibrovascular stroma (Fig 2). A section of spermatic cord from both testes was evaluated for lymphatic invasion with no evidence of neoplastic emboli.

This is an unusual bilateral presentation of testicular tumours with different origins. Concomitant Sertoli and Leydig cell tumours have been reported in a six-month-old boar; the tumours were unilateral and had widely metastasised (Mabara and others 1990).

The lack of local lymphatic emboli indicated a low risk for metastatic spread; due to financial and practical constraints, no further investigation was carried out to determine if metastases were present in other organs. The owner reported the pig was alive with no health problems 16 months following the surgery.

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**Contributors**  HJW initially examined the pig and wrote the draft. RV carried out the histology and provided the descriptions of the pictures.

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**REFERENCE**