



# ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2014 – GEMS

Case 12-134: Tissue from a transgenic mouse.

## Description:

Testis and epididymis: One testis is enlarged and almost entirely replaced by an expansile neoplastic mass. The mass consists of rosettes and lobules of radiating neoplastic Sertoli cells, often centered around a blood vessel, and separated by fibrovascular stroma or areas of necrosis. The neoplastic cells are narrow, elongate, and often arranged in a parallel fashion. Many of the cells are pleomorphic, and in some areas poorly differentiated. Mitotic figures are common, up to 3-4 per hpf. In the well-differentiated areas, the neoplastic cells have uniform oval nuclei, while in the poorly-differentiated areas, the nuclei are open-faced, with finely stippled chromatin and small nucleoli. In a few areas, there are pockets of enlarged germ-like cells, with large, ovoid or lobulated nuclei, large nucleoli, and large cytoplasmic vacuoles. In some areas, there is extensive caseous necrosis. A few dilated seminiferous tubular remnants exist, lined by atrophied, attenuated epithelium. The rete testis is compressed and atrophied. Outside the testicular capsule, there is a thrombus composed of fibrin, pockets of erythrocytes, and granulation tissue, and lined by proliferative fibroblasts (fibroplasia). The mesothelium on adjacent adipose tissue is hypertrophied. The epididymis contains a reduced number of spermatozoa, and many are degenerate. The contralateral testis is much smaller, but consists of active seminiferous tubules in various stages of development and has an epididymis that contains mature spermatozoa.

Diagnosis: Sertoli cell tumor, testis, with caseous necrosis and spermatozoal degeneration.

## Grading:

Cannot pass if the tumor is not diagnosed accurately. It is not an interstitial cell tumor or a seminoma.

The majority of the descriptive points are for the tumor

The minority of the points are for secondary effects inside and outside of the testis.

On a 20 point scale:

Description - 14 points

8 points: The neoplasm itself (including naming the cells, pleomorphic or poorly differentiated, mitotically active, etc) 1 point for the possible germ cells

6 points for other aspects of the description

Morphologic Diagnosis - 6 points