transgenic mice of HCV core protein with variable core mutant gene. Liver tissues from non-Tg group (NTG, n=11), core wild-Tg (TG-K, n=11), mutant core 116-Tg (TG-116, n=11), and mutant core 99-Tg (TG-99, n=11) were examined for TGF-β induced apoptosis in hepatocytes. Active ethanol consumption led to a significant increase in hepatocyte apoptosis. Especially TG-99, expression of the mutant core gene whereby serine-99 was substituted with glutamine (mutant serine(S) glutamine(O)), significantly increased cytoplasmic immunoreactivities for CK8/18. TGF-β1, p-Smad2/3 and p21 in hepatocytes around the centrilobular area with concomitant degenerative changes. Programmed cell death can be further up-regulated by active ethanol consumption in hepatocytes of HCV leads apoptotic cell death. The activation of TGF-\$1 and p-Smad2/3 and interaction with p21 signaling pathway is the major mechanism for HCV-induced hepatocyte apoptosis.

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P#56

Differential Diagnostic Markers for Canine Trichoepithelioma

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Trichoepithelioma(TE) is an uncommon skin condition occurred with single or multiple lesion after puberty. It is very uncommon condition in animals with forming rudimentary hair follicles without actual hair shafts and the only way for treatment is surgical excision. It can be confused with basal cell carcinoma(BCC) both clinically and histologically features, especially in small biopsies. Therefore, several attempts have been made to identify immunohistochemical differences between these entities in medical science, but none in veterinary medicine. A 8-year-old female poodle was referred for nodules sized 1cm diameter on dorsal side of the elbows which has arisen few months ago. Each nodules had different gross findings and did not cause subjective symptoms but there were hemorrhagic on both nodules. The skin was biopsied for pathological diagnosis. Recently, bcl-2 and CD34 have been reported as reliable markers in distinguishing the different two types of tumor. We underwent immunostaining in 1 canine TE and 1 canine BCC with bcl-2 and CD34. TE showed positive staining pattern in bcl-2 while BCC showed negative. With CD34, TE and BCC both showed negative stainings Therefore, bcl-2 have possibility as a marker used to differentiate TE from BCC not only in human but also in canine. And immunohistochemical differential diagnosis between TE and BCC needs further studies with many cases and antibodies in veterinary medicine.

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P#57

Canine Mixed Testicular Tumor With The Cryptorchism

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A male 15-year-old Pomeranian dog with unilateral cryptorchism with tumor mass connected to the testis by vessels was presented. Both of the retroperitoneal cryptorchid testis, tumor mass and bilateral kidney were removed surgically. Grossly, the cryptorchid testis and the mass were very similar appearance showing enlarged, encapsulated, bulging sphere and yellow colored homogenous mass on cut section. The left the right kidney revealed hydronephrosis and hypertrophy, respectively. The presented tumor mass and cryptorchid testis showed similar cell population, complete destruction of normal architecture of testis.

And interstitial cells, Sertoli cells, and germ cells were dispersed and intermixed with collagenous fibers. It was confirmed by vimentin positive cytoplasmic immunoreactivity, Leydig and Sertoli cells, on immunocompared histochemistry. And as histological diagnoses cell populations for the tumor mass and cryptorchid testis, it was revealed that the mass originated from the cryptorchid testis. In this report, we described gross, histopathological and immunohistochemical findings of a rare canine mixed testicular tumor.

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P#58

Bilateral ovarian tumors in a Otaria Byronyia and pyometra

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A 14-year-old female South American sea lion (Otaria Byronyia) with persistent vaginal secretion and chronic-hemorrhagic