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over several years. Hence a longtime survey was started on frozen or routinely formalin fixed animals or organs.

Within two years, necropsies on 87 tenrecs were performed. In the majority of the animals the predominantly pathological findings included a moderate to high fatty liver degeneration and hepatic siderosis. The nutritional status was very good with large fat deposits but a poorly filled or empty gastrointestinal tract. Therefore the fatty liver degeneration was most likely caused by lipomobilisation following a deficient food intake. Sporadic skin and tongue lesions as well as pneumonia were evident.

Excessive iron storage in animals is reported in mammals and birds. A study in common marmosets for example showed that a diet with higher iron levels led to an increase in liver iron content and that those animals had a higher mortality than those on a low iron diet. On the basis of these results a feeding trial was started where the so far used cat or dog food, containing mostly heme iron with a higher availability, is compared to two foods with lower (non-heme) iron levels. Future investigations will show if the changes in the feeding regime had any effect on the occurrence of hepatic siderosis in this study group.

#### Session 2B

### IMMUNOHISTOCHEMICAL DETECTION AND DISTRIBUTION OF THE VIRAL GP55 ANTIGEN IN PIGS NATURALLY INFECTED WITH CLASSICAL SWINE FEVER VIRUS

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**Introduction.** In this study we investigated the distribution of viral glycoprotein (Gp55) in pig tissues naturally infected with CSF virus. Apart of retrospective analyses, during this study we detect a tissue alterations and correlation of viral antibodies with certain cells or tissue types.

**Material and Methods.** Tissue samples (tonsils, mesenterial lymph nodes, spleen, colon and pancreas) were formalin fixed and embedded in paraffin wax. The immunohistochemical (ABC) method was performed by using monoclonal antibody (Monoclonal antibody to Pest viruses - WH303, CVL, UK) in 1:100 dilution.

**Results.** Gp55 antibody labeled numerous cell types in the examined tissues. In tonsils, Gp55 labelled cells were epithelial cells on the surface and in the tonsil crypts, lymphocytes between lymph follicles, macrophages and endothelial cells of the blood vessels. In tissue sections of the mesenterial lymph nodes, the highest accumulation of positive cells was demonstrated in trabecular and subcapsular dilated sinuses and smooth muscle cells in trabecules and follicles.

In the spleen, Gp55 labeled cells were present between follicles. In the pancreatic tissue, positive immunoreactivity was demonstrated in single acinar cells. Gp55 labeled cells in the colon were endothelial cells, numerous macrophages, lymphocytes, and cells of the submucosal and subserosal plexus.

The highest immunoreactivity for Gp55 antibody was expressed in cells of tonsils, mesenterial lymph nodes, spleen and colon. In this organs, the most reactive cells were endothelial, epithelial cells and also macrophages. This finding confirm that they are target cells for CSF virus.

Viral antigen presence in the above mentioned organs was accompanied by alterations of various character as hyperemia, hemorrhages, fibrinoid necrosis, various degenerative alterations, apoptosis, necrosis and inflammations.