



ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2006 – Mock Exam Case 4

4. Tissue from a PIG

DESCRIPTION OF THE HISTOLOGICAL FINDINGS

Pigmented haired skin with skeletal muscle.

The stratum corneum of the epidermis is markedly and diffusely thickened by increased numbers of corneocytes (hyperkeratosis) with retention of nuclei in keratinocytes (parakeratosis). Beneath and within the stratum corneum, are massive accumulations of non-viable neutrophils (suppuration) forming subcorneal and intracorneal pustules. The surface of the pustules is dehydrated and form adherent crusts, in which vegetal debris are embedded. The pustules extend themselves to the infundibulum of hair follicles. Within the crusts, there is a low amount of extracellular, round, anucleate microorganisms, one micrometer in diameter, basophilic (bacteria, cocci), usually grouped by 2 or in microcolonies.

The epidermis shows a moderate hyperplasia and exocytosis of neutrophils and lymphocytes. The superficial dermis is moderately expanded with a seroproteinaceous exudate and a marked capillary hyperemia. Perivascular accumulations of lymphocytes, plasma cells and monocytes, with occasional neutrophils, are present. In the middle and deep dermis, there are slight accumulations of lymphocytes and plasma cells around hair follicles and sweat glands.

MORPHOLOGIC DIAGNOSIS/DIAGNOSES

Diffuse (marked) neutrophilic (0.5) subcorneal (0.5) pustular (1) dermatitis (1) with intralesional cocci (1), morphology consistent with *Staphylococcus hyicus*.

NAME THE DISEASE

Exudative epidermitis (1). *Also accept: greasy pig disease.*

MARKS

Haired skin	1
Parakeratosis with description (nuclei of corneocytes).....	2
Pustules	1
Nonviable neutrophils.....	1
Subcorneal or intracorneal location.....	1
Crusts and vegetal debris.....	2
Bacteria	1
Extension of pustular dermatitis within infundibulum	1
Dermis: hyperemia	1
Dermis: perivascular lymphocytes and plasma cells	2
Morphologic diagnosis.....	4
Name the disease	1
Design	2