

ECVP/ESVP Summer School in Veterinary Pathology



Marie Curie Training Courses

Summer School 2006 - Muscle Case 13

13- Tissue from a horse
Frozen section – HES
13 bis - Tissue from a horse
Frozen section; APS – alpha amylase

Skeletal muscle

Acidophilic fibers in one side of the sample: artefact

Diffuse and generalized vacuolization of myofibre cytoplasm except in one bundle. Five to twelve holes in each cytoplasm, small size (2-3 micrometers): frozen artefact.

On third of the myofibres exhibits grayish elements through their cytoplasm: rods or branched sometimes medusoid elements. Some myofibres exhibit sub sarcolemmal grayish elements. The more involved cells turn to blue (basophilic). Few myofibres are necrotic.

The grayish elements are APS positive (glycogen or complex carbohydrates). The APS stain— pre-incubated with alpha amylase coloration shows that the coloration does not disappear with the enzymatic reaction (complex carbohydrate, not glycogen)

Diagnosis: storage myopathy. Polysaccharide storage myopathy