

HEPATOCUTANEOUS SYNDROME IN ADULT DOG

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Hepatocutaneous syndrome was suspected in 8-year female dalmation dog with erosive and ulcerative skin lesions around mucocutaneous junction, ears and feet and elevated liver enzymes. Biopsy samples from the skin, liver and pancreas were collected and submitted for histopathologic evaluation which confirmed clinical diagnosis.

In the haired skin, microscopical changes typical of superficial necrolytic dermatitis were seen: thick parakeratosis, irregular epidermal hyperplasia and pallor and multifocal apoptosis of keratinocytes. There were also foci of full thickness epidermal necrosis and various inflammatory cells scattered in the superficial dermis.

In the liver there was severe vacuolar hepatopathy with accumulation of lipid and water and marked, multifocal nodular hyperplasia containing morphologically normal hepatocytes. In the pancreas there was mild nodular hyperplasia.

Hepatocutaneous syndrome is a metabolic disease which most commonly occurs due to severe vacuolar hepatopathy with or without concurrent diabetes mellitus. Less often similar skin lesions are seen in association with glucagon-producing pancreatic endocrine tumor. The proposed pathogenesis is metabolic dysfunction that causes cutaneous nutritional deprivation or protein disbalance. Affected dogs have significantly decreased plasma amino acid levels.

The cause of hepatic lesions in this case was not apparent and the prognosis was guarded because of limited therapy. Hepatocutaneous syndrome is uncommon disease of cats and dogs which needs to be kept in mind in animals with crusty, exudative, symmetrical lesions in the skin and elevated liver enzymes.