



Tikrit University
College of Veterinary Medicine

Vitamin A Deficiency

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Lecturers link



Vitamin A Deficiency

Introduction

Reticuloendotheliosis (RE) designates a group of pathologic syndromes in several avian species include 1) a runting disease syndrome, 2) chronic neoplasia of lymphoid and other tissues, and 3) acute reticulum cell neoplasia.

Etiology: family *Retroviridae*, subfamily *Orthoretrovirinae*, genus *Gammaretrovirus*

lesions development Period: within 2–5 months, depending on the amount stored in liver and other tissues of the body

Clinical signs

- 1- Chickens become emaciated and weak, and their feathers are ruffled.
- 2- Egg production decreases sharply.
- 3- The length of time between clutches increases.
- 4- Hatchability decreased.
- 5- A watery discharge from the nostrils and eyes.
- 6- Eyelids are often stuck together.
- 7- Milky white, caseous material accumulates in the eyes.
- 8- Drowsiness, weakness, incoordination, emaciation, and ruffled plumage.
- 9- Ataxia.
- 10- Periorbital edema.
- 11- Lacrimation usually occurs.

Gross and pathological lesions:

- 1- Epithelial damage in the oropharynx and esophagus without accompanying growth depressionkeratinization of intestinal enterocytes.
- 2- Blood spots in eggs of chickens increased in vitamin A deficiency.
- 3- Abnormal embryonic development.
- 4- Decreased sperm counts, reduced sperm motility, and a high incidence of abnormal sperm.

Differential Diagnosis

- 1- Infectious coryza
- 2- Fowl pox
- 3- Vitamins and minerals deficiency (B2, vitamin E and selenium).
- 4- Essential amino acids deficiency.
- 5- IBV

Treatment

Approximately 10,000 IU vitamin A/kg of ration.