

10-Egg drop syndrome (EDS76).

* **Definition:** it is infection disease of laying hens, characterized by producing thin shelled or shell-less eggs.

* **Etiology:** - Pathogenic adenovirus Group 3.

*First isolate 1976, and introduced into chickens through **contaminated vaccine**.

* **Incidence and prevalence:** -wide spread in many countries.

* **Transmission of the disease:** same to HHS.

* **Clinical Signs (Symptoms):-**

*The first was **loss of color in pigmented eggs, followed by production of thin-shelled, soft-shelled or shell-less eggs.**

*The thin-shelled eggs were often rough with **sandpaper-like texture** or granular roughening of the shell at one end of the egg.

*The fall in egg production was **very rapid** or extended over **several weeks**.

*EDS outbreak usually lasted **4-10 weeks**, and egg production was reduced by **upto(40%)**.

***Watery albumin** has described.

* **Gross lesion (P.M):-**

*In naturally occurring outbreaks of EDS, **inactive ovaries and atrophied oviducts, uterine edema, flaccid ovules**, and eggs in various stages of formations in the abdominal cavity.

*Mild splenomegaly.

* **Microscopic lesions:-**

*The major pathologic changes occur into **oviduct and shell glands**.

*Virus replication in the nuclei of epithelial cells, and **intranuclear inclusion bodies** from **7 days post infection**.

*Many affected cells were sloughed into the lumen and there was rapid and severe inflammatory response with macrophage, plasma cell, lymphocytes, variable number of heterophil.

*Inclusion bodies were **not seen after the 3rd day** of abdominal egg production, but viral antigens persist for up to 1 week.

***Diagnosis:-**

- 1-case history.
- 2-Clinical signs.
- 3-P.M lesion.
- 4-Isolation and Identification.
- 5-HI, ELISA.

***Prevention and Control:-**

- 1-Management procedures.
- 2-Vaccination. **Oil-adjuvant inactivated vaccine** is widely use and gives good protection against EDS, the birds are vaccinated between **14-16 weeks of age**.

***Treatment:-**

- 1-No Successful treatment.
- 2-Vitamins, increase **calcium** or protein in the ration.