



Inclusion Body Hepatitis

First described in 1963 concurrent with a severe respiratory outbreak in broilers.

1970

Canada

Delmarva

Indiana

Tennessee



Etiology

VIRUS

- ❖ An adenovirus will reproduce the disease in immunosuppressed birds.
- ❖ Gumboro virus plays a role in the field problem. Lack of maternal antibody will result in an early Gumboro infection which leads to immunosuppression.

Incubation Period

3-5 Days

Course of Disease

- ❖ Usually seen in birds 3-5 weeks of age and lasts up to 3 weeks.
- ❖ Excessive cull rate for 5-6 weeks.

Method of Spread

- ❖ Lateral



Clinical Signs

- ❖ Birds usually found dead
- ❖ Shanks and comb become very pale
- ❖ Reduced growth rate

Sudden Death

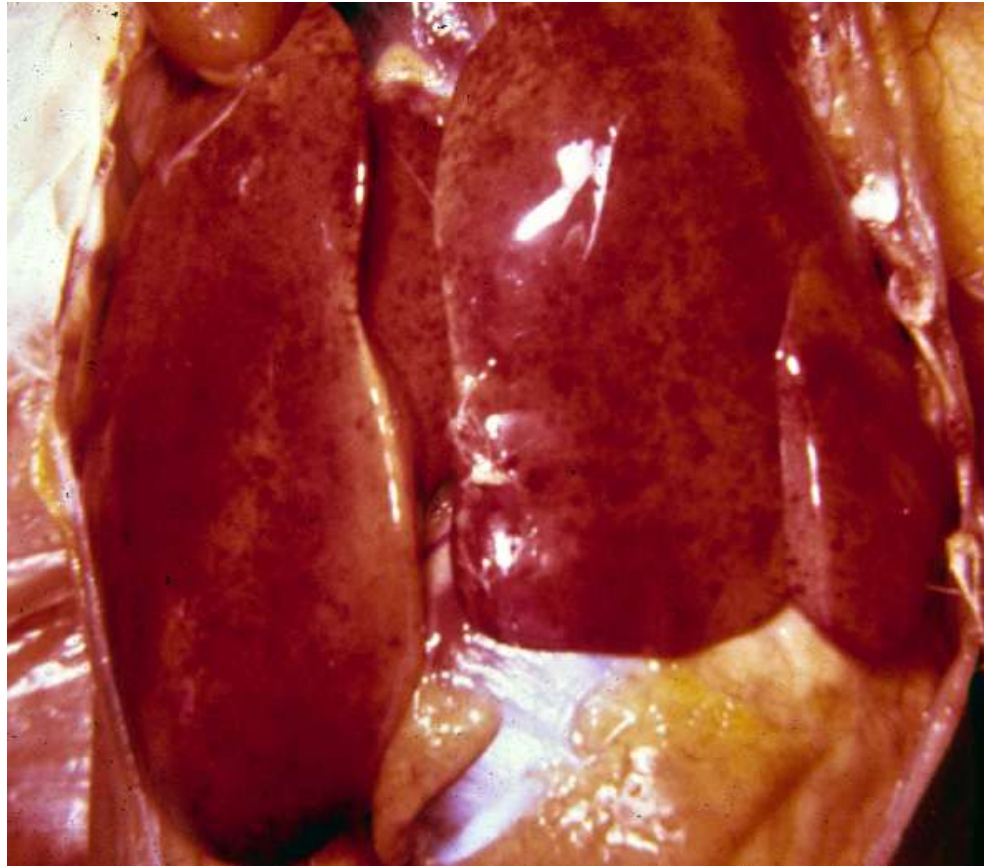




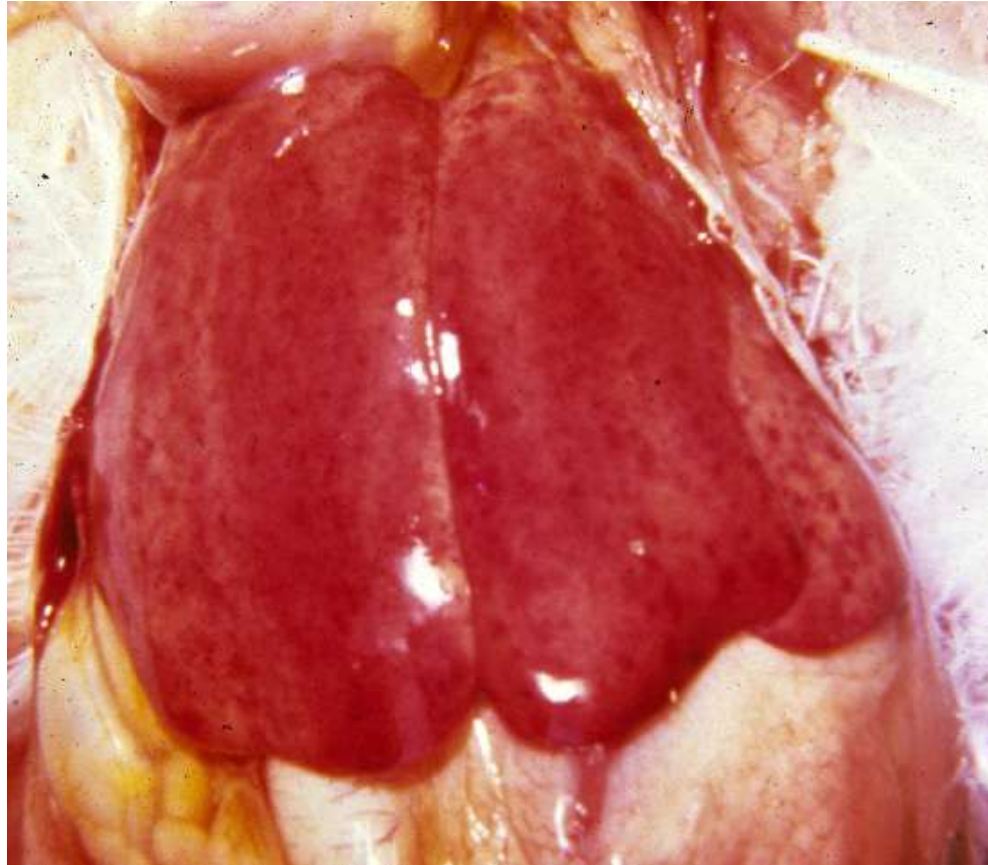
Postmortem Lesions

- ❖ Livers swollen, mottled with subcapsular stellate hemorrhage.
- ❖ Soft liver parenchyma.
- ❖ Kidneys swollen and pale with some hemorrhage.
- ❖ Bone marrow very pale.
- ❖ Small bursa of Fabricius.

Liver



Liver



Liver



Liver



Bone Marrow



Bone Marrow





Diagnosis

- ❖ Histopathology

- ❖ Kidney

- ❖ Congestion, hemorrhage and nephrosis

- ❖ Liver

- ❖ Vacuolation of hepatic cells due to fatty changes

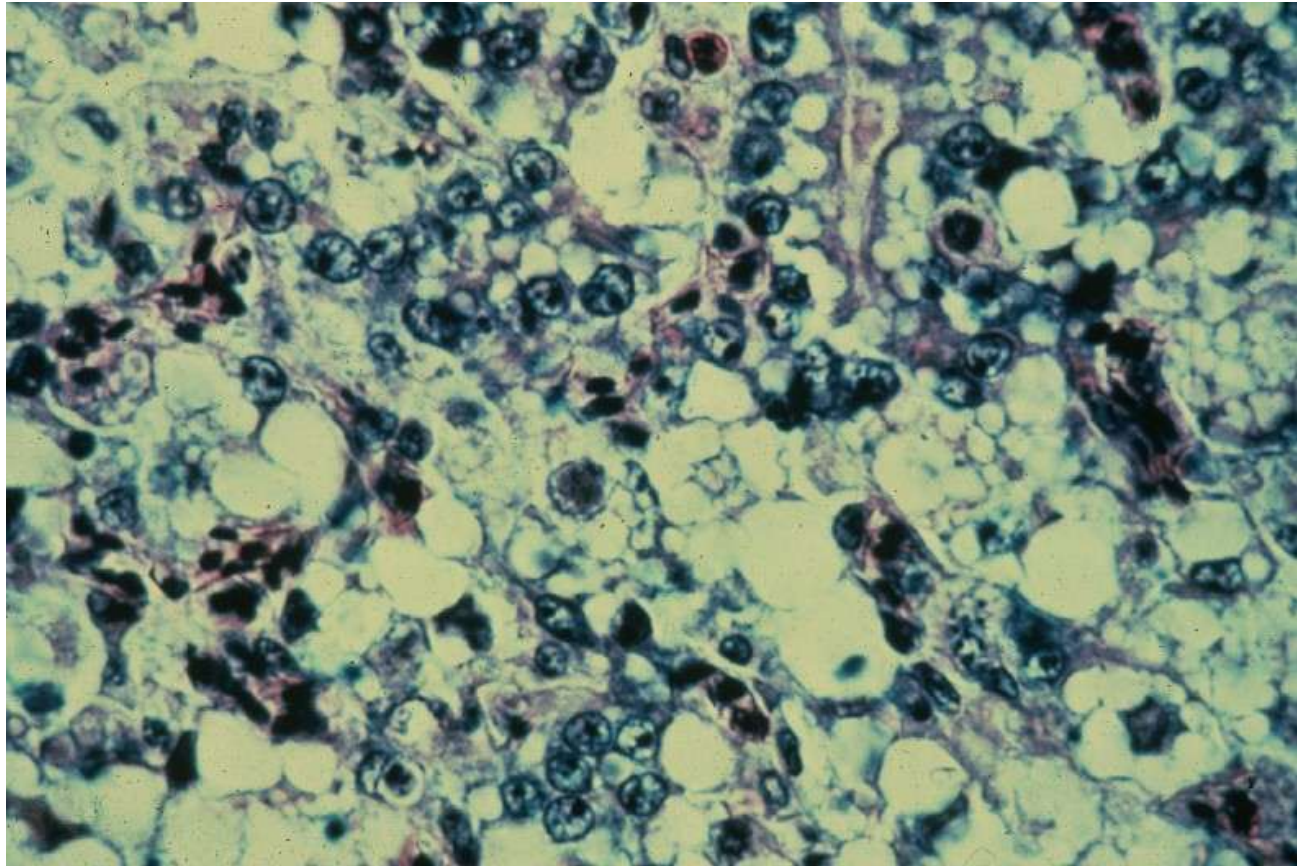
- ❖ Scattered areas of necrosis with focal areas of lymphocytes



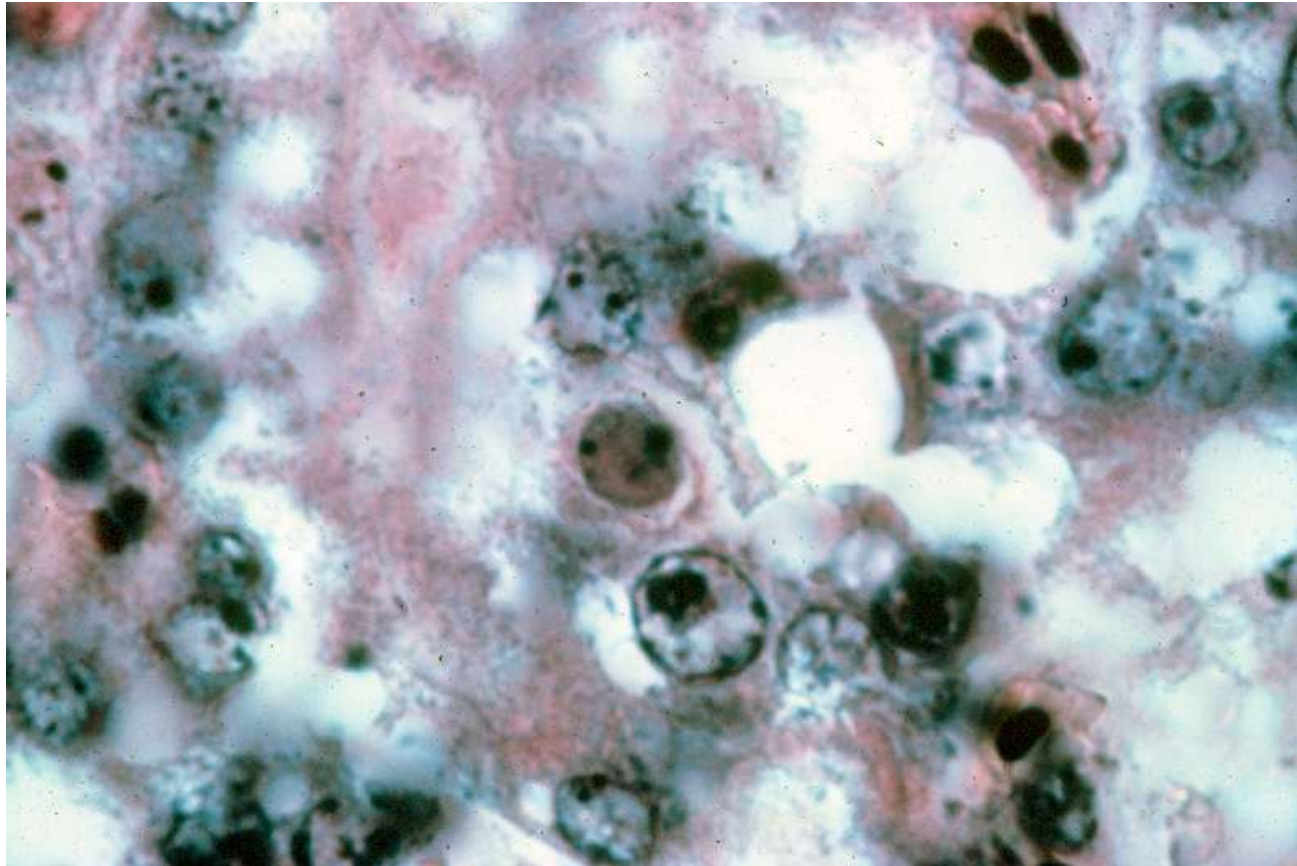
Diagnosis

- ❖ Histopathology (continued)
 - ❖ Large Cowdry Type A intranuclear inclusion bodies – very numerous
 - ❖ Inclusions surrounded by a clear halo
- ❖ Viral Isolation
 - ❖ Need SPF eggs. Some embryos will have liver lesions grossly and microscopically

Histo Liver



Inclusion Bodies





Treatment

Broad spectrum antibiotics and vitamin fortification will diminish the cull rate



Control

- ❖ Vaccination
 - ❖ Attenuated vaccines for Gumboro
- ❖ Decontamination of premise