

CROP MYCOSIS (THRUSH, CANDIDIASIS)

- Most common mycotic diseases of poultry
- Most important in young poults and occasionally cage layers

ETIOLOGY

Candida albicans

- Very ubiquitous in normal flora
- Follows debilitating condition
- Broad spectrum antibiotics favor development by disruption of normal flora balance.
- Seen in “spiking mortality” poultts due to antibiotic use.

INCUBATION PERIOD

- Experimentally about 30 days, but has been found in 7-14 day old poults
- Induced by giving sugar water to poults.

COURSE OF DISEASE

- 3 to 4 weeks
- May become chronic, then several weeks

MORTALITY

- Poults and chicks - up to 20 to 30%
- Older birds - after 4 weeks usually low

METHOD OF SPREAD

1. Drinking water
 - a) associated with unsanitary, over-crowded condition
 - b) slimy water founts, wet litter
2. Infected birds source of contamination
3. Cages due to decreased bacterial competition
No contact with feces.

SYMPTOMS

- Poor growth
- "Sick chick attitude"
- In layers - decrease egg production 15 to 20%
- Birds vomit in feed trough

POSTMORTEM LESIONS

- Non-inflammatory - thickened crop and/or mouth
- White, circular, raised ulcer-like formation
- Pseudomembrane
- Proventriculitis
 - Gizzard erosion
- Can occasionally be cultured from the liver.
- May cause splotchy hemorrhages in the digestive tract.

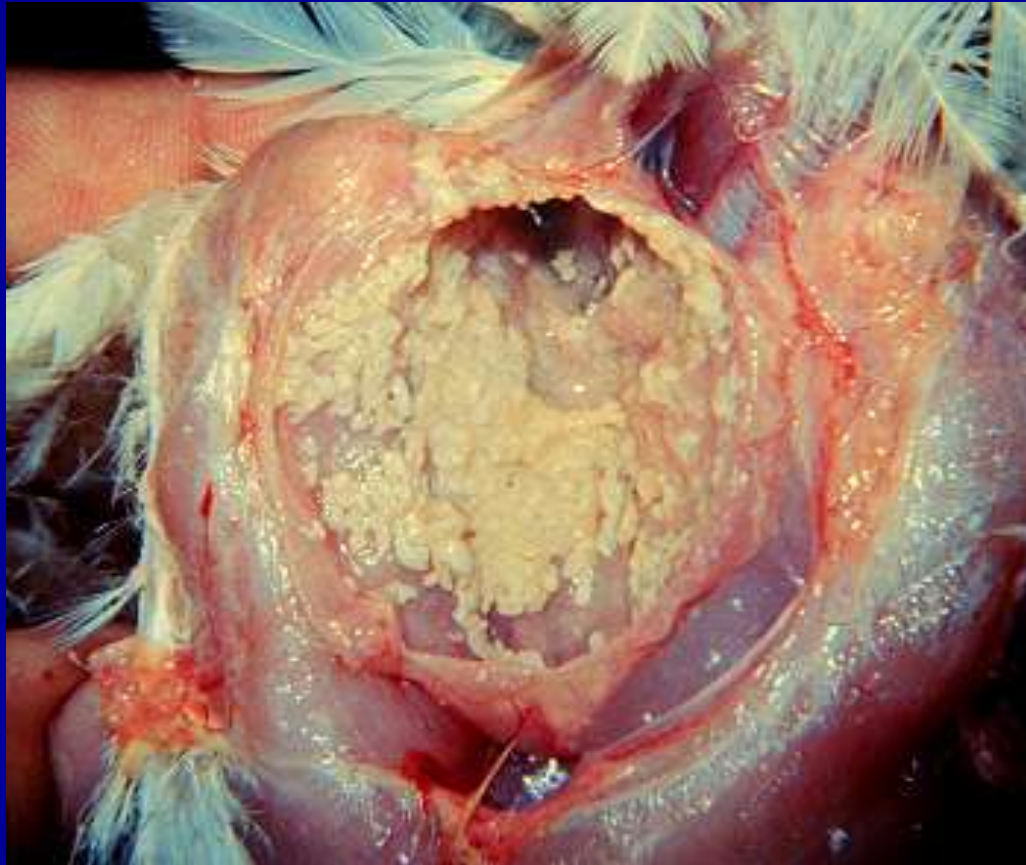
Crop mycosis



Crop mycosis



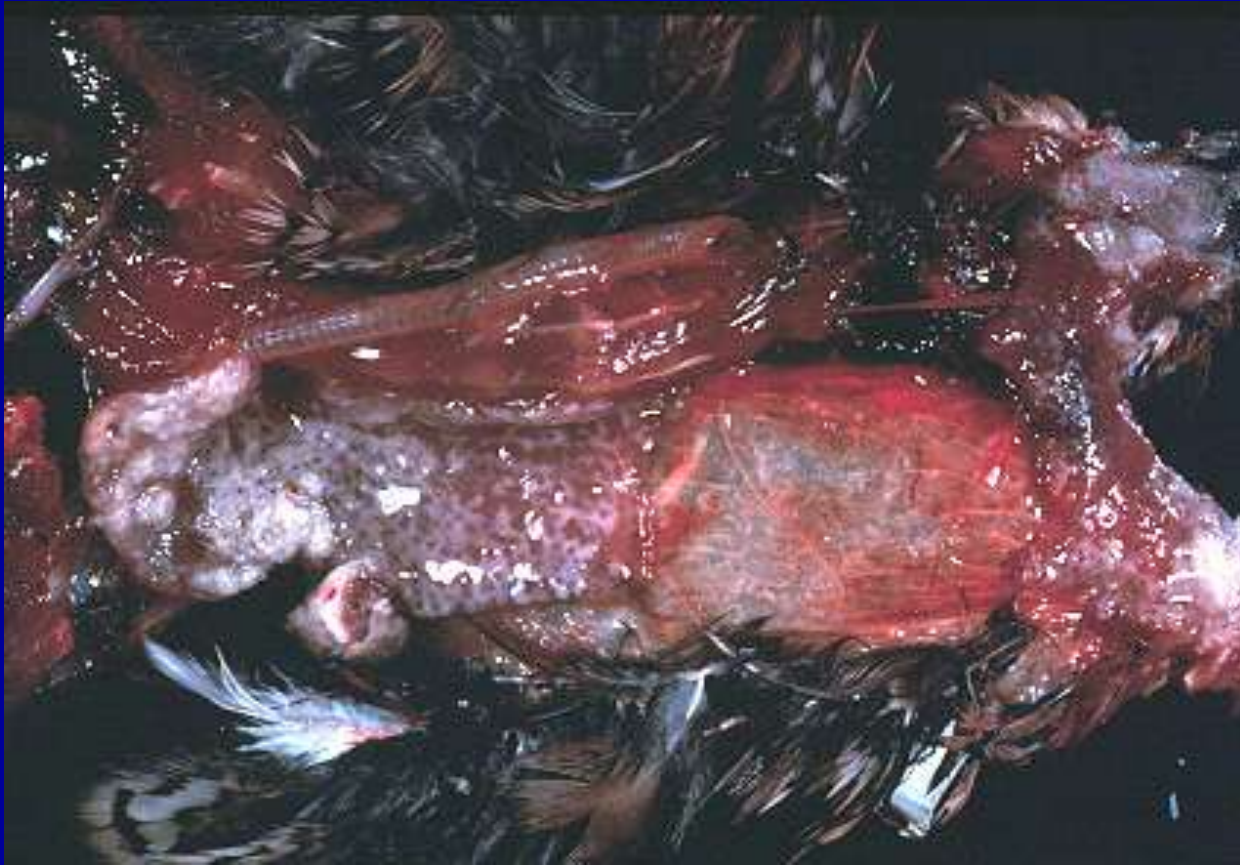
Crop mycosis



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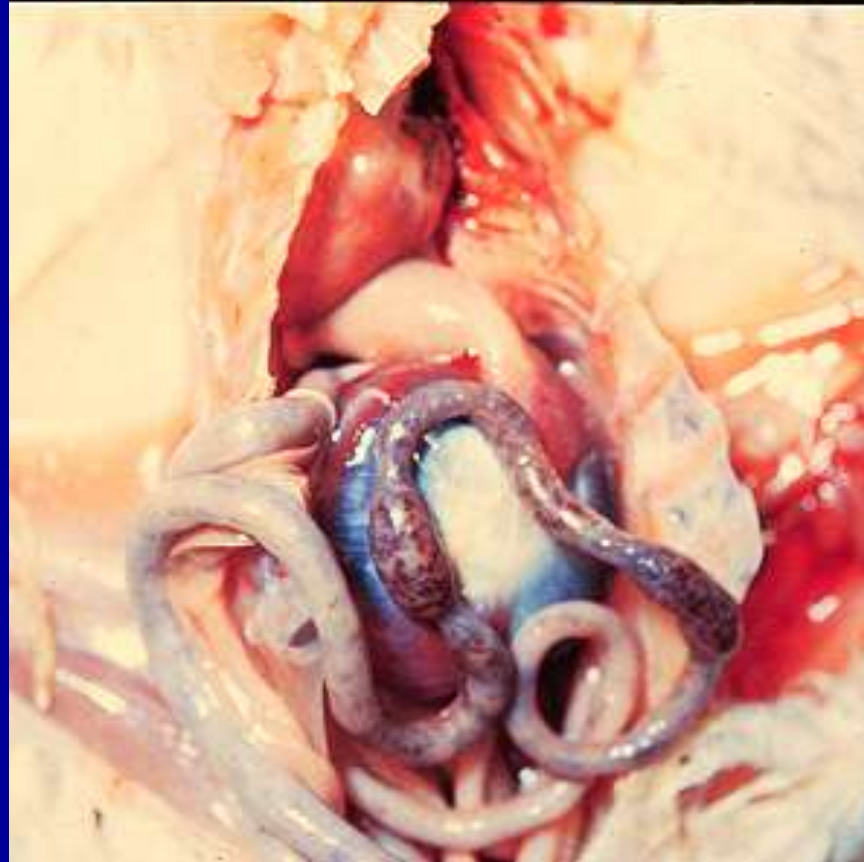
Esophageal lesion



Gizzard erosion



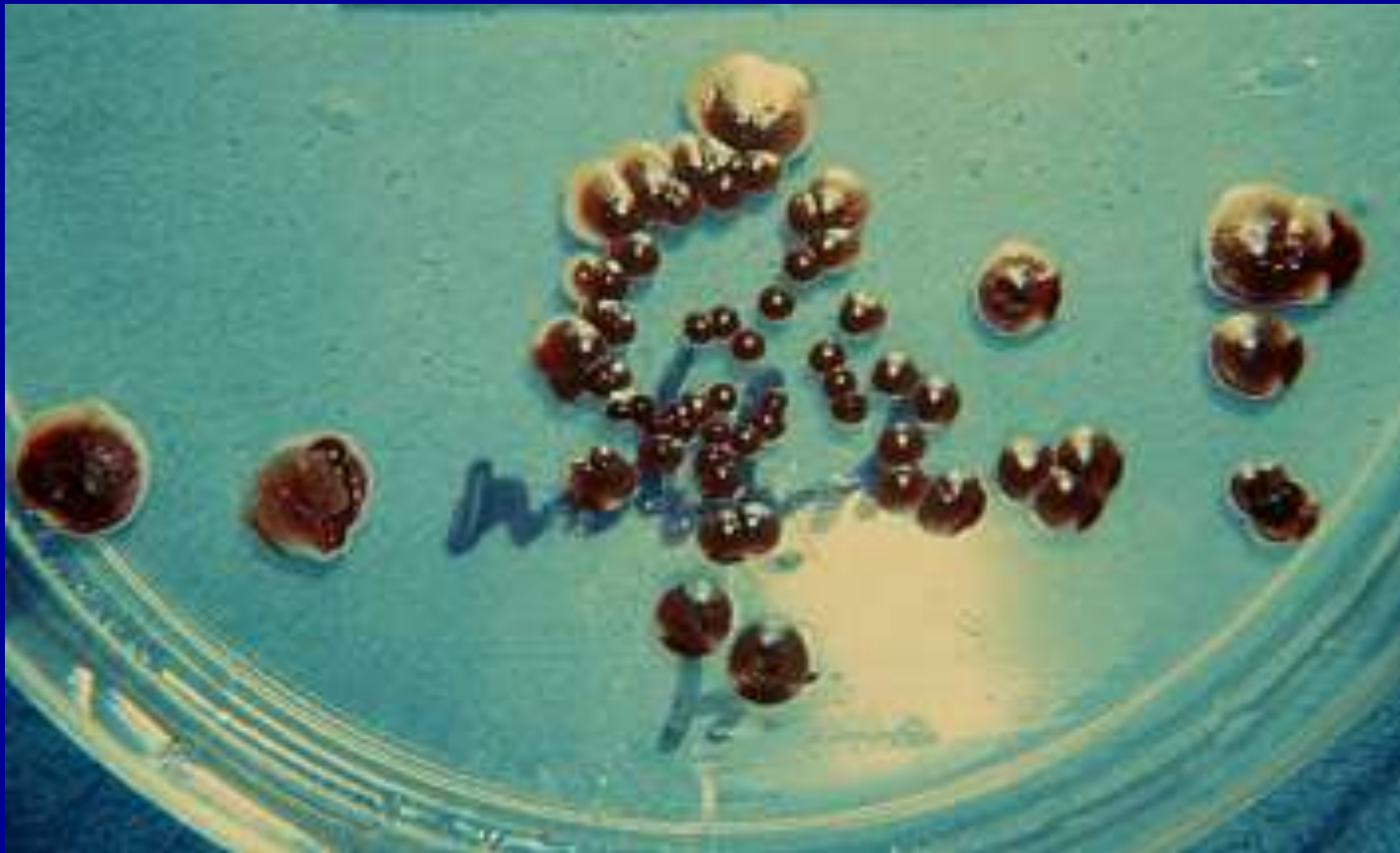
Enteritis



DIAGNOSIS

- Suggestive - typical lesions, non-inflammatory
- Positive - isolation and identification
 - Special medias used:
 - Corn meal agar
 - Biggy agar - brown colony with white halo

Biggy agar



Wet mount



TREATMENT

Mycostatin (nystatin)

100 gm/ton 7-10 days

CuSO₄

1:2000 in water, 1-3 #/ton

Chlorine in the drinking water at 5 ppm.

Clean up

PREVENTION

- Maintain sanitation
- Avoid prolonged use of broad spectrum antibiotics
- Mycostatin (nystatin) in feed 50 gm/ton
- Ca⁺⁺ or Na⁺ propionate in feed 3-5 #/ton
- Propionic acid antifungals in feed 1-4 #/ton.
(Depends on concentration of active ingredient).

