CROP MYCOSIS (THRUSH, CANDIDIASIS)

- Most common mycotic diseases of poultry
- Most important in young poulets 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” poults due to antibiotic use.
INCUBATION PERIOD

• Experimentally about 30 days, but has been found in 7-14 day old poult's

• Induced by giving sugar water to poult's.
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
Crop mycosis
Esophageal lesion
Gizzard erosion
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

\[ \text{CuSO}_4 \]

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).