



Candidiasis (Thrush)

Candidiasis is a mycosis caused by infection with the mycelial yeasts of the *Candida* genus, principally *C. albicans*. The organism is commensal and an opportunistic pathogen. The term thrush is applied to *Candida* infections of the upper digestive tract. Stomatitis oidica, muguet (France), Soor (Germany), moniliasis, and sour crop.

Etiology:

The most frequent causal agent is *Candida albicans*, a dimorphic yeast that appears as round to oval 3-4 μm budding yeasts. *C. albicans* is ubiquitous in the environment and is often present in the upper gastrointestinal tract of normal birds, human and other animals.

Influencing factors:

One of the most common predisposing factors is prolonged antibiotic administration, which suppresses normal bacterial flora, thus allowing *Candida spp* to proliferate.

Pathogenesis:

Candida is acquired by ingestion and probably becomes part of the resident flora of the mouth, esophagus and crop; under predisposing conditions it proliferates on the surface and hyphae invade superficial epithelial layers. This invasion stimulates epithelial hyperplasia and pseudo-membrane or diphtheritic membrane formation.

Clinical Signs:

Mortality directly caused by candidiasis is low to nonexistent and most signs are preferable to other concurrent diseases or reduced growth due to reduced feed intake. In rare cases there is systemic invasion and signs of neurological, renal or intestinal disease may be present.

Gross Lesions:

The surface of the crop and, less frequently, the esophagus and pharynx are coated with multifocal or confluent mats of white cheesy material. Candidal mats and membranes are often adherent and cannot be washed away like normal accumulations of mucus. An inflammatory response to mucosal candidiasis is mild unless ulceration is produced.

Histopathology:

Colonization of the keratinized stratified squamous epithelium of oral, crop, and esophageal mucosa typically is limited to the stratum corneum or with extensions into the stratum spinosum. The mucosal surface may be covered by a crust composed of an admixture of necrotic debris, sloughed epithelial cells, leukocytes, bacterial colonies, and the pseudohyphal forms of *Candida*.

Treatment

- Nystatin in drinking water 200 mg/L with Sodium lauryl sulfate 25 mg/L for 5 days.

Control:

- Good hygiene.
- Adding of nystatin at dose of 100 mg/kg of food.

