Draschia megastoma

Large-mouthed stomach worm

Description: Adult worms are whitish and 10 to 25 millimeters long.

Predilection site: Stomach.

Geographic distribution: Common in many states.

Life cycle: Large-mouthed stomach worms have an indirect life cycle. An intermediate host – either the housefly (Musca) or the stablefly (Stomoxys) – is necessary for the transmission of the stomach worm to the horse, the principal host. The larvae of the stomach worm are passed in feces and are ingested by fly maggots that develop in manure. Stomach worm larvae develop within the maggots and become infective L3 larvae at about the time that the adult fly emerges from its pupa. L3 larvae are deposited as flies feed on a horse’s lips, nostrils, and any flesh wounds. The horse becomes infected internally if it licks and swallows these larvae, which will then mature in the stomach. Horses can also become infected by ingesting infected water or feed. Larvae deposited on wounds do not complete their development to the adult stage, but remain in the area of the wound, causing a skin disease called cutaneous habronemiasis.

Significance: Adult worms are of little concern, but larvae that infect the tissues around the eyes and in the area of wounds cause annoyance and disfigurement. In addition, tumor-like swellings that develop in the gastric mucosa may subsequently rupture.

Clinical effects on host: Draschia megastoma provokes the formation of tumor-like growths on the stomach wall. These can rupture or, on occasion, block the passage of food from the stomach. Cutaneous or ocular habronemiasis – commonly known as summer sores – are of much greater significance.

Larvae deposited in wounds migrate and feed, which extends the wound and prevents healing. These infections tend to heal spontaneously during the following winter, but often recur in subsequent warm seasons when flies are prevalent. Larvae deposited in the eyes cause wart-like lesions of the conjunctiva, accompanied by watering of the eyes and sometimes photophobia.

Diagnosis: Adult worms may be found during necropsy. Eggs or larvae found in feces are diagnostic. Larvae in lesion scrapings demonstrate ocular and cutaneous habronemiasis.