Zuku Review FlashNotes™

Trichinellosis (Trichinosis)
Condensed Version

Presentation:
Trichinella spiralis, Nematode, forms cysts in muscle
Predilection for: Tongue, diaphragm, eye, masticatory & intercostal muscles

Swine: NO clinical signs

Humans: High fever, weakness, arthralgia, myalgia, abdominal pain, diarrhea, facial & periorbital edema, hives, dizziness, paresis & occasionally death

Test of choice:
- Hx: Eating rodents, wildlife, infected raw meat; cannibalism, tail biting
- Histopath: Microscopic exam for larvae: Tongue, diaphragm
- At slaughter: Inspect meat for viable trichinae: Trichinoscopic & digestion tests
- ELISA: Detects anti-Trichinella antibodies

Rx of choice:
Domestic animals: Impractical to treat
Humans: See physician.
- Mebendazole or albendazole can treat intestinal infection
- There is no specific treatment for trichinosis once the larvae have invaded the muscles.
- Cysts remain viable for up to 30 years, Pain killers can help relieve muscle soreness.

Prevention: Prevent ingestion of viable Trichinella cysts Reportable, Zoonotic
- Pigs: Good management;
  - Control rodents; prevent cannibalism: tail biting, wildlife carcasses
  - Cook garbage fed to pigs for 30 min @ 212°F (100°C)
- At slaughter: Inspect meat for viable trichinae
- Process “ready to eat” products to kill trichinae: Adequate heating, freezing, curing
- Adequately cook pork at home: Heat meat to internal temperature ≥137°F (58°C)
- Freeze pork: 5°F (-15°C) for 20 d OR -9.4°F (-23°C) for 10 d OR -22°F (-30°C) for 6 d
- DO NOT rely on freezing to kill trichinae in meat other than pork (bear, wild boar, etc)

Pearls:
- In North America it is assumed that ALL pork is infected
- High infectivity for pigs & rodents. Most mammals susceptible

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Classic Question(s)

Name 4 management steps that will help to prevent Trichinella spiralis infection in pigs.

What clinical signs are typical in people with trichinosis?
What clinical signs are typical in pigs infected with Trichinella spiralis?

What are the two most important encystment sites of Trichinella spiralis larvae?