

Dracunculiasis: A Quick Guide (Guinea Worm disease)

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The roundworm *Dracunculus medinensis*, sometimes known as the Guinea worm, causes Dracunculiasis. It causes a painful, inflammatory skin sore as well as arthritis that is disabling. People become sick by ingesting water contaminated with roundworm-infested crustaceans. Female worms travel to the skin after mating and form a blister, commonly on the lower legs or feet, with swelling, redness, and burning pain in the surrounding area, as well as damage to the joints near the blister and When the worm emerges from the blister, doctors diagnose the infection. 3.5 million persons had Dracunculiasis in the mid-1980s. In various parts of tropical Africa, Yemen, India, and Pakistan, the disease was widespread. Only 28 cases were reported in 2018 due to international efforts to eradicate Dracunculiasis. Only a few African countries—Chad, Mali, and Ethiopia, as well as Sudan and South Sudan—remain in the transmission zone [1].

The guinea worm is a worm that lives in a guinea pig's stomach. Drinking water contaminated with microscopic infected crustaceans infects people. Inside the crustaceans, immature *Dracunculus* worms (larvae) dwell. The crustaceans die after being eaten and release larvae, which breach the gut wall and enter the abdominal cavity. In about a year, larvae inside the abdomen mature into adult worms, and the adult worms mate. Female worms exit the abdomen after mating and travel through tissues beneath the skin, usually to the lower legs or feet. They form a blister there. The blister creates excruciating scorching pain and eventually bursts. The pregnant worm releases larvae into the water when people try to soothe the burning by soaking their leg in water. Once the larvae are in the water, they seek out and infect other larvae [2].

When the worm begins to burst through the skin, signs of Dracunculiasis appear. Over the worm's site, a blister forms. The blister's surrounding area itches, burns, and becomes inflamed—swollen, red, and painful. The worm's materials may trigger an allergic reaction, resulting in difficulties breathing, vomiting, an itching rash, and incapacitating pain. The blister will soon open, revealing the worm. The worm eventually exits the body, and the symptoms fade. The blister usually cures once the adult worm has left the body. However, bacterial infections occur around the worm's hole in roughly half of the victim

[3].

Dracunculiasis Diagnosis

- A worm appears at the blister.
- To find calcified worms, X-rays can be used
- To find calcified worms, X-rays can be used When the adult worm develops at the blister, the diagnosis of Dracunculiasis is evident

Dracunculiasis can be avoided by using a piece of fine-mesh cheesecloth to filter drinking water, a pot of boiling water and only drinking chlorinated water.

Adult worms are removed. Adult worm (which can grow to be up to 47 inches [120 centimeters] long) is usually eliminated by rolling it on a stick over a period of days to weeks. When the worm's head begins to emerge, the person grabs it and wraps the worm's end around a short stick. As the worm loosens, the stick is gradually twisted, wrapping more of the worm around it. The worm is eventually torn loose and tossed. The worms are resistant to all medications. Antibiotics may be required if a bacterial infection develops around the worm's entrance.

References

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