

Guinea Worm/Dracunculiasis Eradication Programme

Training Course for Guinea Worm Coordinators



Developed by

Centers for Disease Control
Training and Laboratory Program Office
Division of Technical Services

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Center for Infectious Diseases, Division of Parasitic Diseases,
Parasitic Diseases Branch, Guinea Worm Task Group

for

Global 2000-BCCI Guinea Worm Eradication Project
and
United Nations Development Programme

WATER SOURCE CARDS



1. Tube well with hand pump--Safe source

Considerations:

- Villagers may not like the taste.
- May require more soap when used for washing.
- May require special funds for training and/or maintenance.
- Requires villagers to wait their turn to collect water.
- Water use tariff may be required by the government.



2. Well with rope and bucket--Safe source

Considerations:

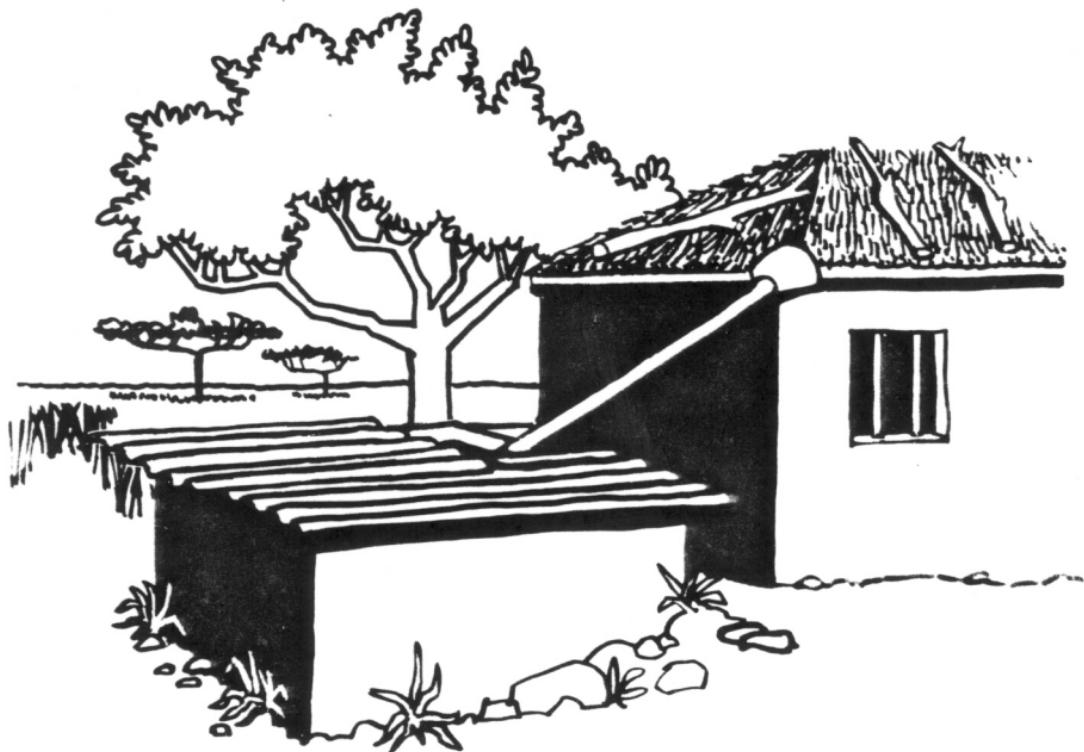
- Villagers may not be able to provide bucket and rope.
- Requires villagers to wait their turn to collect water.
- Water use tariff may be required by the government.
- Villagers must not climb upon the well and spill water with guinea worm larvae into the well.
- Requires more energy and effort than most other types of water sources.



3. River, stream, or canal--Safe source

Considerations:

- During dry season, pools may form or people may dig water holes in the river or stream bed which can become contaminated.
- Only safe if flowing.



4. Rainwater catchment system--Safe source

Considerations:

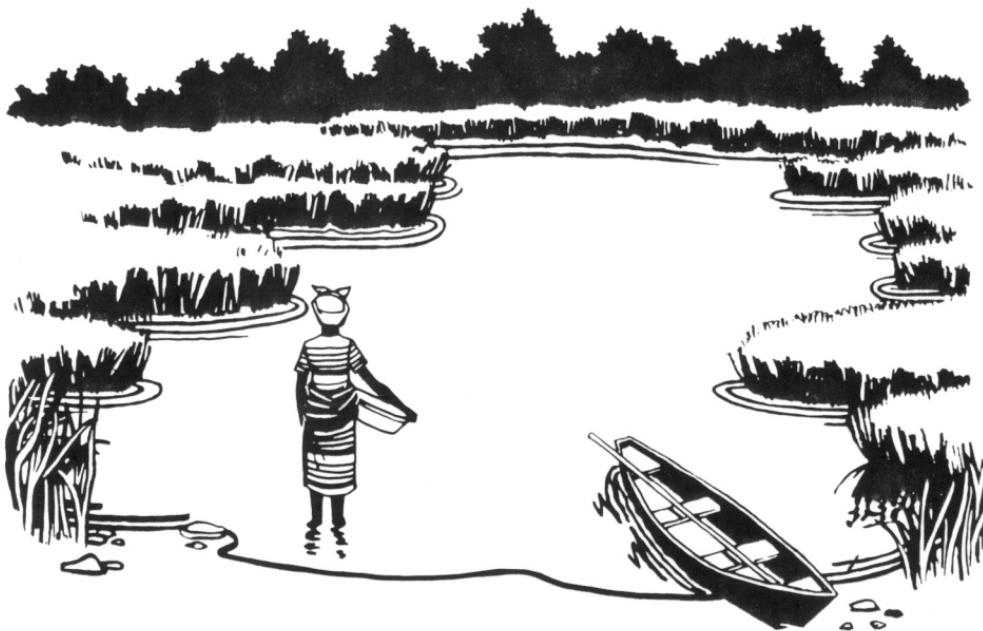
- Requires knowledge, labor, and materials for construction.



5. Piped water--Safe source

Considerations:

- Requires villagers to wait their turn to collect water.
- Water use tariff may be required by the government.



6. Large pond, lake, or dam-- Unsafe source

Considerations:

- See illustrations 8 - 10 for options on how to make the water safe.
See illustrations 10 - 15 for options on how to keep infected persons out of the water.
- When water volume is small enough, may be suitable for temephos (Abate).



7. Small pond or riverbed --Unsafe source

Considerations:

- See illustrations 8 - 10 for options on how to make the water safe.
See illustrations 10 - 15 for options on how to keep infected persons out of the water.
- Application of temephos (Abate) may be appropriate.



8. Filtering water--Makes water safe by filtering out cyclops

Considerations:

- Accidental contamination occurs if filter material used improperly, or has tears.
- Requires consistent behavior.



9. Applying temephos (Abate) to water--Makes unsafe water safe by killing all the cyclops in the body of water, thereby breaking the life cycle

Considerations:

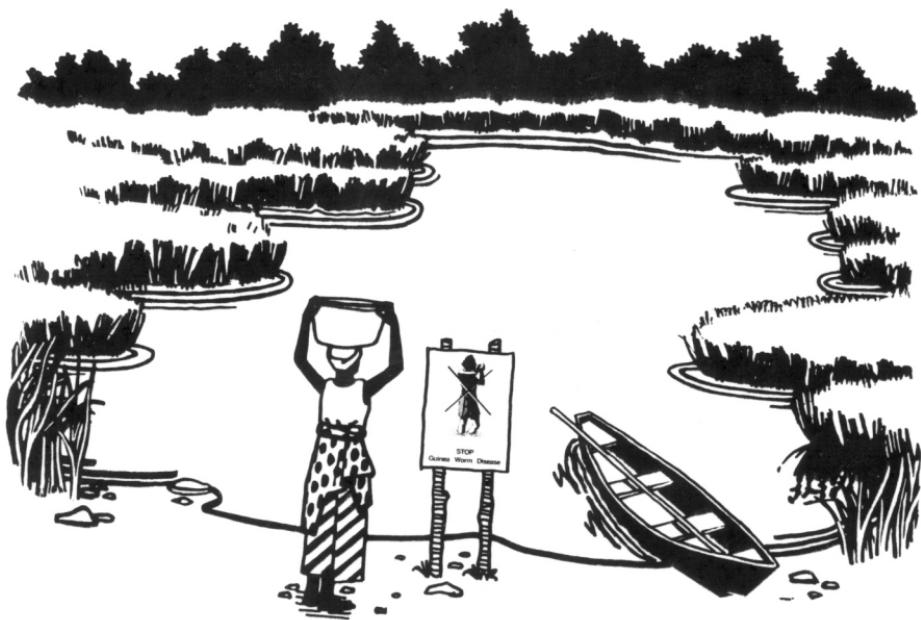
- Causes odor and cloudiness for a period after application.
- Requires care in handling temephos.
- Requires precision in calculating water volume and required dose.



10. Boiling water--Makes unsafe water safe by killing all of the cyclops in the water

Considerations:

- Shortage or expense of fuel.
- Requires time for cooling.
- Affects the taste of water.
- May be difficult concept to teach.
(There is no word for boiling in many local languages.)
- Boiling also kills other germs.



11. Displaying posters at water source--One way to keep infected persons out of the water

Considerations:

- Cannot be read by majority of villagers.
- Requires personal responsibility for compliance.
- Someone may remove poster.



12. Building a resting shelter at water source

One way to encourage infected persons to stay out of the water while a noninfected person gathers water for them

Considerations:

- Requires labor and materials for construction.
- Requires infected person to wait.
- Requires person willing to gather water.
- Requires maintenance.



13. Building a platform into water source--One way to keep infected persons from coming into contact with the water

Considerations:

- Contamination can still occur if people are careless.
- Requires labor and materials for construction.



14. Posting a local authority to monitor water source--One way to keep infected persons out of the water source

Considerations:

- Requires payment of watchman.
- Depends on proficiency of watchman.
- May be difficult to enforce where villages share a water source.



15. Educating community members--One way to keep infected persons out of the water source

Considerations:

- Requires visit by someone to deliver health education messages.
- Depends on ability of educator to communicate messages.
- Everyone who uses water source must hear and understand messages.

FLIPCHART

Life Cycle Flipchart

Health Education Visual Aid



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1. One hot day Kofi went to get a drink of water from the village water hole. The water had guinea worm babies in it, but he could not see them. The babies went into his body where they will live and grow into adult guinea worms.



1.

2. It will take about 12 months for a baby guinea worm to grow into an adult guinea worm. During this long time there is no way for Kofi to know that he has guinea worm. It will live inside his body and slowly move from the stomach to a place where it decides to exit through his skin.



3. When the worm is ready to come out, a painful blister appears, which causes a burning feeling. Many people try to relieve the pain by putting the blister in water.



4. When it touches water, the blister breaks, the worm starts to come out, and thousands of tiny guinea worm babies are released into the water. So whenever Kofi goes into the water to gather water, or just to relieve the pain, he is filling the water with guinea worm babies.



5. Most of the time, a guinea worm comes out from either the legs or the feet. However, a worm may sometimes come out from the hand, arm, chest, head, breast, or other body part. It is possible for one person to have several guinea worms at once coming out of different places. Kofi has a worm coming out of his foot. His wife, Mary, has two worms, one on her leg and one on her arm.



- When Kofi's neighbor, Aya, comes to drink the water containing the babies, the cycle starts all over again.

Review Questions

- How did Kofi and Mary get guinea worm?

Answer

By drinking water that had guinea worm babies in it.

- Do you think any other people in this village have guinea worm?

Answer

Yes, because they all drink from the same guinea worm contaminated water.

- Why is it important that people with guinea worm not go into the water?

Answer

So that guinea worm babies will not be released into the water and the guinea worm cycle will be stopped.

- What can we do to keep infected people out of the water?

Answer

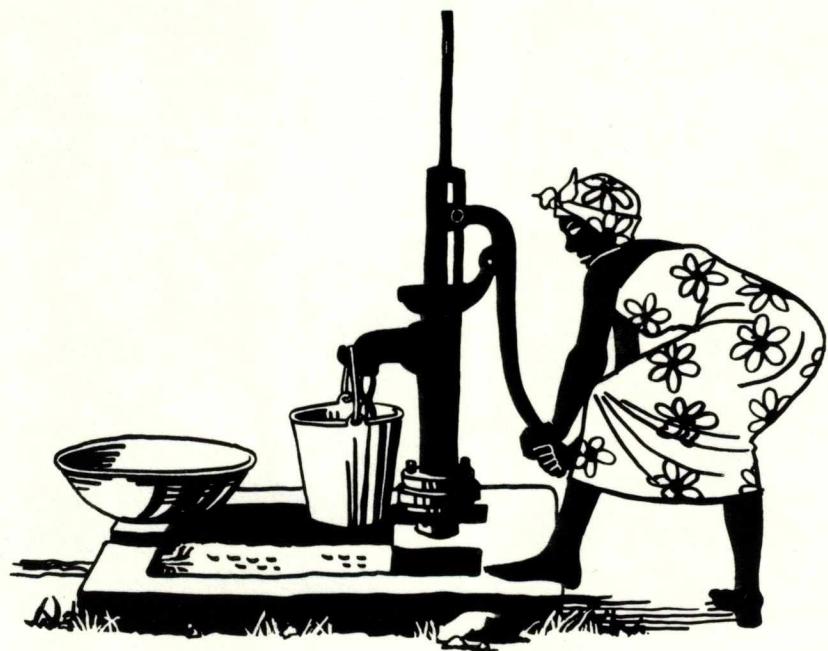
- Spread the word to those who are infected;*
- Be firm with those who do not cooperate;*
- Encourage people with painful ulcers to rinse off the ulcer in a bucket of water instead of immersing it in the drinking water source (water in bucket should then be poured on the ground, away from water source);*
- Keeping infected people out of the water requires the cooperation of the whole community.*



INTERVENTION POSTERS



**STOP
Guinea Worm Disease**



**STOP
Guinea Worm Disease**



**STOP
Guinea Worm Disease**



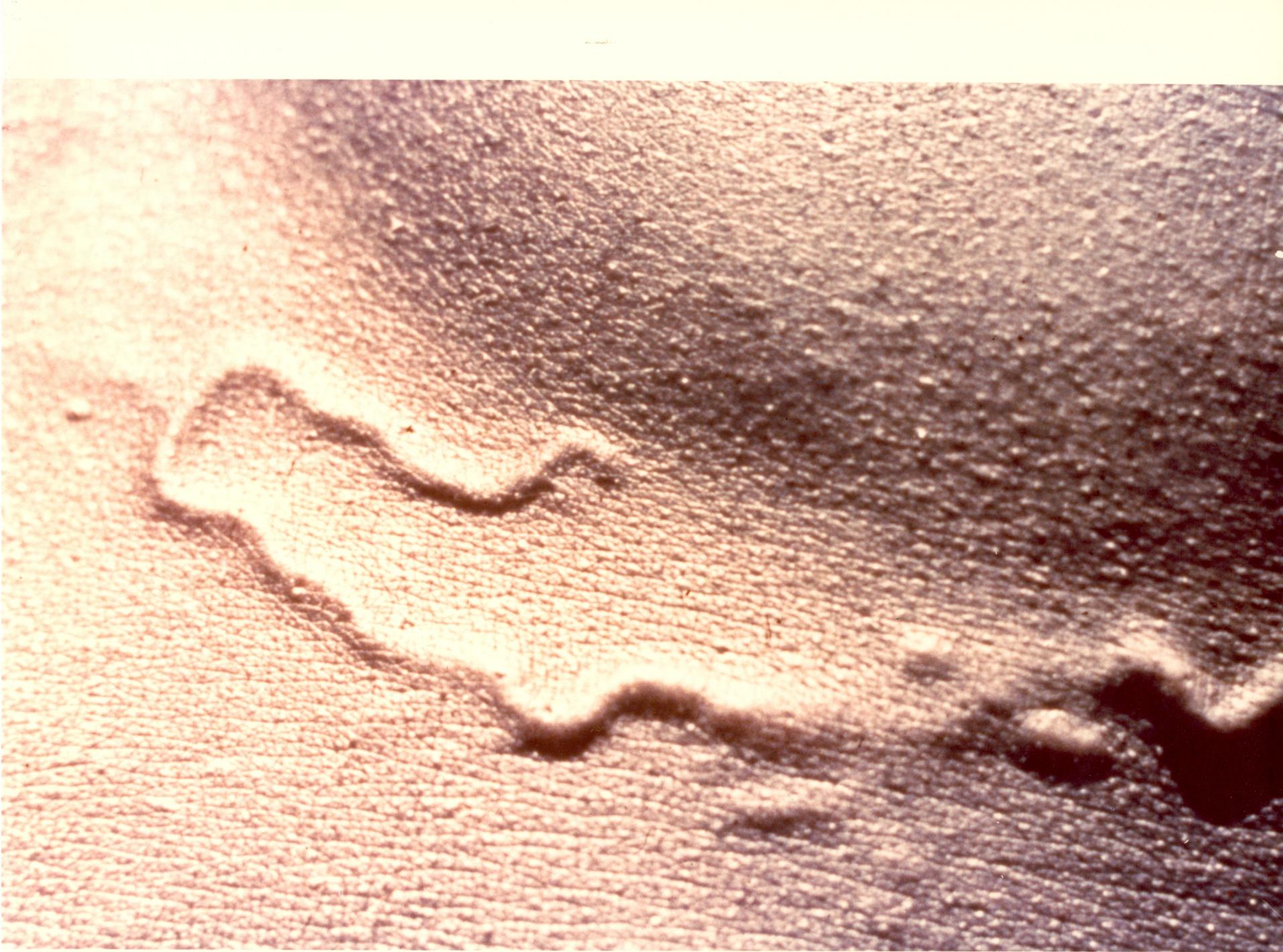
STOP
Guinea Worm Disease

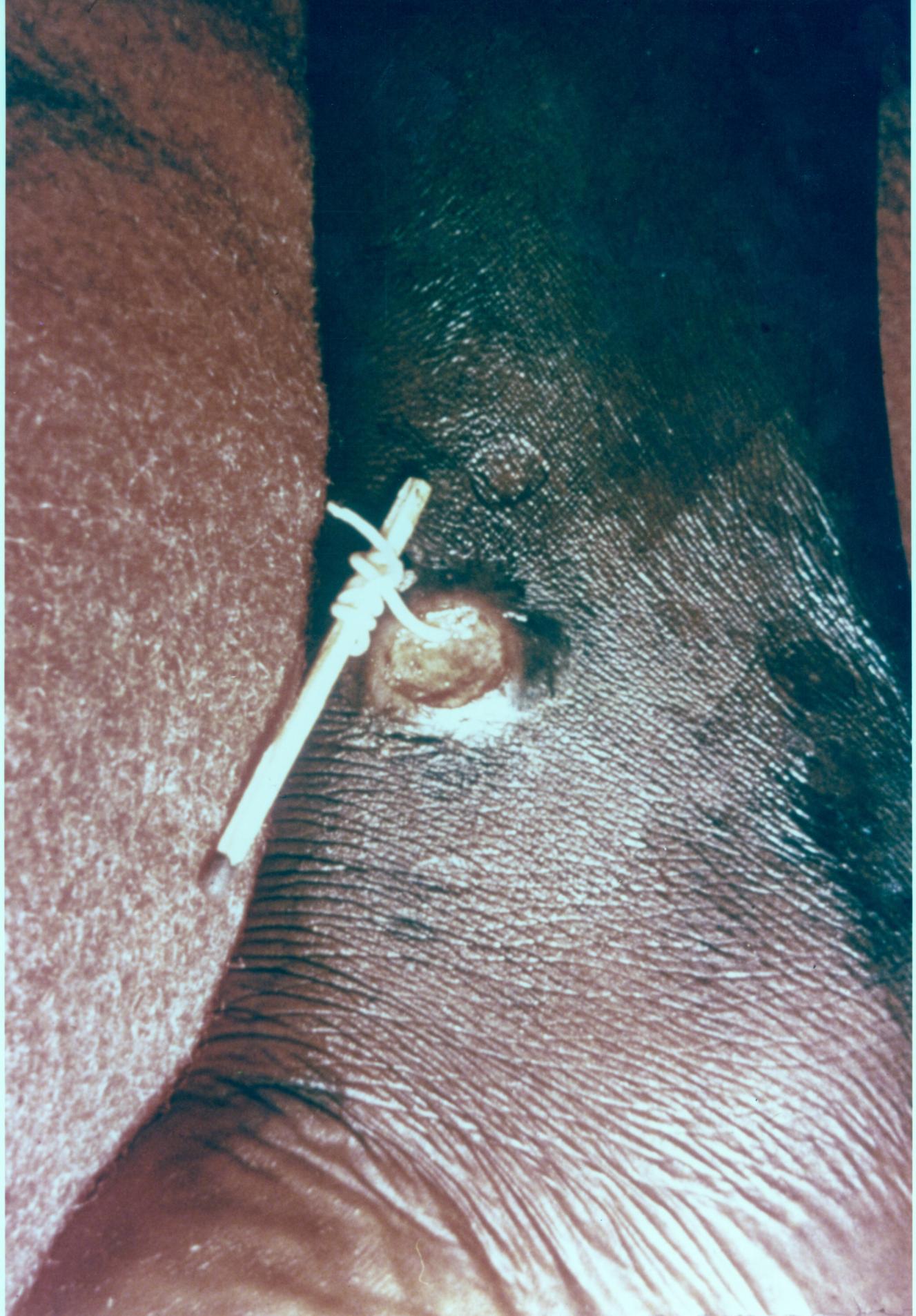


**STOP
Guinea Worm Disease**

PHOTOGRAPHS













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