



Jigger flea (*Sarcopsylla penetrans*). Female with the abdomen distended.

Drawing of a female flea distended with eggs

- The eggs are released through the hole in the skin, back to the soil to continue the cycle and infect the next victim.
- Dogs, cats, cows, goats, chickens and ducks are also infected in the same way and continue to contaminate the environment with jigger eggs.
- The hole in the skin made by the jigger also allows the entry of bacteria, fungi and viruses which cause further complications, such as ulcers or tetanus.
- Although many people may have only one or two jiggers, some have very many and are unable to walk properly, if at all, and many lose their toe nails.
- Most victims are unable to sleep well at night as a result of the pain and itching caused by the growing jigger. Teachers report disruption of classes and children's learning ability due to the constant itching and scratching.



Patient's foot heavily infected with jiggers

- Often those with jiggers will not seek medical attention or attend school due to the stigma associated with it. Local communities link jigger infection with witchcraft and laziness, as well as correctly, poverty. Infected children are ridiculed and isolated by their peers.

Where are jiggers found?

- Jiggers are found in tropical areas of Africa and America. In Kenya they are a major cause of suffering in Coast, Rift Valley, Central, Western and Nyanza provinces.

Who has jiggers?

- In Kenya, 5-25% of people are infected depending on the area, with a total of 2 million people estimated to be infected.
- Approximately 75% of cases are children under 15 years, with the remainder being mostly the elderly, the mentally & physically handicapped and heavy alcohol users.

How can jiggers be treated?

- **DO NOT** cut the jigger out, this usually results in infection with bacteria, fungi or viruses including tetanus which is fatal.
- **DO NOT** use chemicals sold for treatment of animals such as cattle dip, these can be extremely harmful and have been known to result in the feet having to be amputated.
- **DO NOT** purchase a few tablets of antibiotics to apply yourself.
- **DO use Neem/Coconut oil preparations:**
 - Wash the feet.
 - Dry thoroughly.
 - Apply a few drops of neem and coconut oil preparation and spread over all of the infected skin.
 - At least 2 applications are needed, up to 4 for the worst cases over 1 week.
 - Do not apply a lot of oil.

Neem/coconut oil preparation available from:

JIGFIX: The Ultimate Herbal Jigger Formula,

MWI Enterprises, Mombasa.

Call 0716 441560.

How to prevent jiggers

1. Wear closed shoes at all times (not slippers or flip flops)
 2. Pave house floors and outdoor resting areas with mud + cow dung mixture, mud or sand + cement (5%) mixture, floor tiles or stones.
 3. Wash the body, especially hands and feet every night with soap, preferably neem soap.
 4. Keep animals out of houses and areas of the compound used for resting and eating.
 5. Wash domestic animals with insecticide or Neem solution.
 6. Keep houses and compounds clean, swept, no food waste and no soft sand and dust.
 7. Treat floors inside house and areas used most often for sitting in the compound, with a Neem solution.
 8. Treat floors and compound with a chemical pesticide such as deltamethrin.
- **Take care not to do this near bee hives, rivers, lakes or the sea as the chemicals will kill bees and aquatic animals which are important food sources.****

Neem (*marubaini/ mkilifi*) Solution

- Half fill a large bucket with neem leaves,
- Add fresh water,
- Soak neem leaves in water for 4-5 days.
- Use this water to soak the soil and wash animals.
- TAKE CARE NOT to damage the neem tree. You will need it again.



JIGGER FACTSHEET

What are jiggers?

- The jigger is a tiny flea, known scientifically as *Tunga penetrans*, locally in Kenya as *Funza* and elsewhere as sand flea or chigoe.
- Jiggers spend part of their life (eggs, larvae and pupae) in the soil.

How do jiggers cause disease?

- It is the adult female flea that burrows into the skin of humans, usually beside the toe nails and between the toes and grows rapidly into a sack of eggs.



Magnified photograph of an adult female jigger

Designed by Malindi Jigger Working Group and printed by:

For more information call: 0701 446 288

