

A clinical quiz that turns heads

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This column is aimed at developing your clinical acumen. A clinical quiz will alternate with a short discussion of a clinical sign. You are invited to send us requests for future topics and to provide photographs of clinical signs for the quiz section. Kindly send a fax or e-mail with your requests and mail high gloss photographs or a disk with high resolution (300dpi) jpeg files to us. (See contact details above) Photographs may include clinical signs, photographs of poisonous insects, plants, snakes, contaminated water or anything that may cause sickness or disease in South Africa. Kindly provide a short clinical synopsis of 100-200 words from which a quiz can be formulated.

This intensely itchy lesion appeared on a 65 year old patient's toe, six days after spending a week on the golden beaches of neighbouring Mozambique. What may be the cause?

quiz



Answer



Photo: courtesy of Prof WK Jacyk, UP.

Unlikely causes:

- **Ingrawing toe nail (septic paronychia)?** Big toe usually affected.
- **Acute gout?** Not likely at age 65 for a first attack, and also more likely to affect the big toe.
- **Trauma?** The patient would most likely be aware of some incident.
- **Larva migrans (creeping eruption)?** More likely, but wrong again. Because dogs are not forbidden from beaches, canine hookworm larvae from dog excreta are often found in the sand. As the name *creeping eruption* implies, one would expect an inflamed red track of the larva, instead of a single round lesion as seen here. (See picture)

With more South Africans visiting tropical destinations, other possibilities will have to be considered as well.

Tunga penetrans

Also called sand flea infestation, this tiny blood-sucking flea completes its life cycle in loose dry sand. The gravid females attach to the skin of any mammal, but prefer humans or pigs. There it will dig through the skin with only the distal part of the abdomen protruding through the entry hole through which eggs are deposited onto sand. There they hatch into larvae that live on organic material before evolving into a chrysalis, which turns into an adult flea. After copulation, adult females start looking for the next host. In barefoot walkers most lesions are found between the toes or next to nails where the skin is softer.

Adult females die naturally after a period of about three weeks. Often the culprits can be dug out with a sharp object. Locally applied insecticide may be another option, provided the infestation is not too extensive.