

DRACONTIASIS*

(A Case Report)

MULTIPLE INFECTIONS

By

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Bhatia and Raghvan (1952) estimated that five million persons were living in the guineaworm infested areas in India. According to them the infestation was endemic in large areas of Rajasthan, former Hyderabad State, Bombay now Maharashtra, Andhra, Tamil Nadu, (Formerly Madras), Madhya Pradesh and East Punjab. Dracontiasis is rare in this part of the country which is evident from the fact that the present case was the second case seen at Agra, in the last twenty years. Strangely enough Dracontiasis is quite common in Bharatpur district of Rajasthan which is about 56 kilometers from Agra, although it is so infrequent at Agra itself. This prompted us to report the present case of multiple infection.

Case Report. A young lady aged 30 years presented in the Skin Clinic of S. N. Hospital, Agra with swelling and ulceration of right leg and foot. She gave the history that a month back she developed red coloured swelling which burst open. Long threads came out which increased in length day by day. When the thread was out, the pain and swelling in the area subsided in a week's time.

Examination revealed that on the dorsum of her right foot opposite the heads of third and fourth metatarsal, she had small dark red granulomatous swelling with a tiny hole in the centre from which the 'thread' was reported to have emerged. On the right foot below the medial malleolus, a firm tense bulla was noted. A small granulomatous red raised swelling was noted on the lateral malleolus of the right leg below the knee and on the lateral side of the leg. Swellings were tender, red and warm and showed signs of cellulitis.

The clinical appearance, the suspicious history of worm and history of taking water from step well suggested the possibility of guineaworm infestation. A sterile gauze swab, soaked in boiled and later cooled water was applied to the lesion of her right foot below the medial malleolus. After two hours of application the bulla burst open and a worm emerged from the lesion. The end of guineaworm was rolled upon a sterile stick. Application of water was continued and the worm emerged out. A day later another worm appeared above the left lateral malleolus and was similarly rolled on stick.

Her blood count was done which revealed Haemoglobin 12 Gm. % W.B.C. count 5600 cells/cumm. Polymorphs 72, Lymphocytes 22 and Eosinophils 3 (No

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Eosinophilia). E. S. R. was normal. X-ray of the leg showed no calcification in the soft tissue.

Three days later in the evening her temperature rose to 38.4°C and the area below the right knee joint became tender red and swollen producing a sero sanguinous discharge. Similar treatment with swab of wet water resulted in the emergence of guinea worm.

DISCUSSION

Guinea worm (*Draconculus medinensis*) is a nematode parasite. Infection with a single worm is usual but multiple infection is not uncommon, (Adams and Maegraith 1960). The infection in man results from drinking water containing cyclopes infected with guinea worm larvae. These larvae after penetrating through the intestinal wall, migrate through connective tissue for about a month, during which time they mature and mate. The gravid female moves to those parts of the body which most commonly come in contact with water and reaching there breaks through the skin to discharge larvae intermittently whenever the part comes in contact with water. The worm then dies or emerges spontaneously.

Rao (1942) reported that more than 50 percent cases were in the age group of 11-30 years in Osmanabad district of formerly Hyderabad State. Lindberg (1948) reported that the disease was rare in children under four years of age and was maximum in the age period 4-55 years.

The incidence among the males was five times more than the incidence among the females (Bildhaiya et. al. 1969). According to the report of Director of Health, Mysore, the incidence was more in males (1956).

One attack of the disease does not appear to produce any immunity from subsequent attacks. In fact, an infected person apparently becomes more susceptible to the disease than one who had never suffered from it. Out of total 3129 cases investigated by Bildhaiya et. al. (1969) in 67 percent of cases there were more than one attack of the disease. In 308 cases more than 10 attacks and the highest number of attacks was 50 in one individual.

In the large majority of cases these nematodes are found in the lower extremity of the patients and in them again a large number around about the ankle joints. The next most favourite situation is the leg. In cases where multiple worms are found the thighs are usually found to be affected while it is rare to see the worms emerging in this situation where there is only a single worm. In the upper extremity the forearm and wrist are the common sites. In small number of cases they are found in the external genitalia both in males and females. The back is the common site for the emergence of worms in Bhishties

Symptoms are mainly due to allergic and toxic manifestation. Secondary infection however may occur and can lead to serious complications. Eosinophilia is marked but in some instances may be absent (Strong 1944). This was absent

in our present case. Diagnosis is usually not difficult if the guineaworm reaches the skin surface and if one is aware of the condition.

SUMMARY

A case of multiple guineaworm infestation is reported.

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