

CHRONIC ENCYSTED GUINEA-WORM LESION

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GUINEA-WORM infestation is prevalent in some sections of the Hubli Medical District of the Southern Railway. These sections are situated in the civil districts of Dharwar, Bijapur and Sholapur of Bombay State. No cases are encountered among residents of railway colonies as no step wells are in use, but railway employees, especially engineering gangmen, who live in the villages adjoining railway stations, develop the disease since in some of these villages step wells appear to be still in use.

Cystic Swelling.—The purpose of this contribution is to report a noteworthy clinical manifestation of guinea-worm disease. The clinical signs presented by these cases were consistent. The results of two different types of treatment for the same condition are compared.

Patients with this type of infestation come for treatment of a chronic swelling, in parts of the body usually below the umbilicus. On examination a well-defined, cystic, subcutaneous swelling is seen. Usual duration is less than six months. No evidence of active inflammation like warmth, redness or tenderness are noted round the swelling. The swelling is not generally attached to the overlying skin except in some areas. On careful palpation it is found that the cyst has a well defined margin and at one spot at its periphery, a calcified guinea worm, giving a cord-like feel is felt. The cyst is adherent to the tissues deep to it. On aspiration fluid contents are drawn, which present certain characteristics. The material is light yellow in colour and of mucoid consistency. Sometimes small, white, thread like bits of the disintegrated

guinea-worm may be aspirated through the aspirating needle, if its bore is sufficiently wide. A radiograph of the swelling shows a calcified fragmenting guinea-worm. The patients give history of previous guinea-worm disease.

As regards treatment, an earlier case was treated by incision, gentle scraping of the wall and allowing the cavity to heal by granulation. It was decided to explore the subsequent cases by dissection, as on clinical examination the swelling appeared to be well-demarcated from overlying skin. Exploration revealed that the cyst had a well defined wall and could be enucleated intact from the overlying skin and underlying deep fascia. A calcified portion of the guinea-worm was found to be projecting from the cyst wall into the surrounding subcutaneous tissue space. After enucleation of the cyst the resulting wound was closed by primary suture and healed uneventfully. On radiography, the enucleated cyst presents a fine picture of the calcified disintegrated pieces of the worm inside the cyst and the intact portion projecting out from the cyst wall. The operation scar and outline of the cyst of one of the cases is shown in a clinical photograph. The radiograph and photograph of the enucleated cyst are also shown (Plate XXVII, Figs. 1—4).

The pathologist's report of the specimen is as follows:

“The specimen is a localised chronic abscess, with thick fibrous walls, evidently due to irritation caused by a guinea-worm. Parts of the worm itself can be clearly made out along the outer surface. The abscess contains thick, cheesy pus. The abscess wall shows fibrosis and foreign body cell-reaction around the remnants of the calcified worm.”

The results of the two types of treatment are tabulated as shown below for comparison:

| Name of patient | Situation of cyst | Type of treatment | Number of days for healing of wound |
|-----------------|-------------------|--------------------------------------|-------------------------------------|
| Nagiah .. | Popliteal region. | Incision and healing by granulation. | 32 |
| Hanumanthu | Iliac region | Enucleation and primary suture. | 7 |
| Sikander .. | Lumbar region. | Do. | 10 |

Summary

(1) A noteworthy and well-defined clinical manifestation of guinea-worm infestation is presented.

(2) Typical clinical signs are enumerated.

(3) Results of two different types of treatment for the same condition are submitted.

I am grateful to Dr. E. Somasekhar, F.R.C.S., D.P.H., Chief Medical Officer, Southern Railway, Madras for permission to send this article for publication Dr. G. D. Valiath, M.D., Professor of Pathology, Stanley Medical College, for Pathology report and photographs, and Dr. J. Sriraman, M.B.B.S., Assistant Surgeon, Railway Hospital, Hubli for assistance rendered in collecting data.

PLATE XXVII

Chronic Encysted Guinea-Worm Lesion. (Page 391).

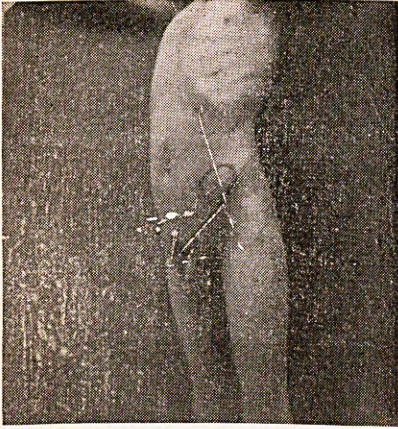


Fig. 1.

Nagiah. Outline of cyst shown by dye marking round operation scar.



Fig. 3.

Inside of the cyst.



Fig. 2.

Enucleated cyst.

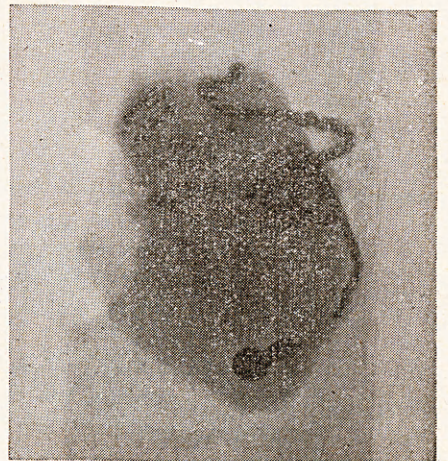


Fig. 4.

X-ray picture of cyst. Showing calcified guinea-worm.