

***Mycobacterium leprae* in seminal fluid: a case report**

S S PAREEK* & MANSOOR AL-NOZHA†

**Department of Dermatology*; †*Department of Medicine, College of Medicine, PO Box 2925, Riyadh, Saudi Arabia*

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Introduction

Testicular involvement leading to impotence, sterility, and gynaecomastia is well documented in lepromatous leprosy.¹⁻³ Rogers & Muir⁴ described the presence of *Mycobacterium leprae* in the seminal vesicles. Bacteria were also demonstrable in the form of globi in seminiferous tubules of lepromatous patients.⁵ This report concerns a patient with lepromatous leprosy who showed the presence of *M. leprae* in seminal fluid.

Case report

A 36-year-old married man of Yemeni nationality was seen in the clinic. He complained of pain in joints and body associated with loss of sensation in both the hands for a period of 6 years. For about a year, he had noticed the loss of hair on eyebrows and felt pain in both testicles. At the same time he became aware of a lesion in the mouth.

Cutaneous examination showed infiltrated nodules on the right forearm which were not tender, and sensation was intact. There was a marked loss of hair from the eyebrows on the lateral side. A white, rough granulomatous lesion was noticed on the palate which was neither tender nor interfered with routine feeding. Bilateral testicular atrophy and epididymitis were noticed during examination. Gynaecomastia was not present.

The patient's complete blood picture was normal. Erythrocyte sedimentation rate was 30 mm in the first hour (Wester-Green method). Serological test for syphilis was negative. Urine analysis and chest X-ray were also normal. Ziehl-Neelsen staining of nasal and seminal fluid smear showed numerous acid-fast bacilli. Spermogram showed low count of sperms.

The treatment given to the patient comprised a daily oral dose of dapsone, 25 mg and rifampicin 600 mg. Within 2 weeks of starting the therapy, the oral lesion disappeared. After about 6 months, the cutaneous lesions responded satisfactorily and the seminal fluid smear no longer showed acid-fast bacilli.

Discussion

It has been reported earlier that half of the male patients with lepromatous leprosy develop testicular atrophy with direct invasion of seminiferous tubules and Leydig cells by *M. leprae*.^{5,6} Epididymitis and azoospermia are also common complications in these patients.² Although the presence of *M. leprae* in seminal vesicles has been demonstrated by previous investigators, they have only rarely been reported in seminal fluid.⁴ The presence of acid-fast bacilli in the semen of this patient was therefore of particular interest. Although the bacilli were not inoculated into mouse foot-pads, their morphology resembled that of *M. leprae* and the morphology of acid-fast bacilli from other leprosy lesions in the patient and was completely different from the morphology of *M. smegmatis* (R J W Rees, private communication).

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