CASE REPORT

Tuberculosis of the glans penis healing with meatal stenosis

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SUMMARY

A 45-year-old man presented with ulceroproliferative lesion of the glans penis. Clinical diagnosis was penile carcinoma and incisional biopsy was performed. Histopathology report came as penile tuberculosis. The lesion healed with antitubercular treatment. Meatal stenosis occurred at 2 months follow-up and was managed with meatotomy.

BACKGROUND

Glandular tuberculosis is a rare form of genitourinary tuberculosis.¹ It usually presents as ulcerative or nodular lesion on glans and can mimic various pathologies. We report a case of glandular tuberculosis which presented as an ulceroproliferative lesion mimicking a malignant lesion.

CASE PRESENTATION

A 45-year-old man presented with an ulcerative lesion on the glans penis for the past 4 months. It was painless. He did not have any history of sexual exposure other than his wife. The patient did not have a personal or family history of tuberculosis. On examination, there was an ulceroproliferative lesion of 3 cm×2 cm involving almost the whole of the glans (figure 1). There was no tenderness or discharge. The urethral meatus was not distinctly visible but the phallus and rest of the urethra felt normal on palpation. The scrotum, testis and epididymis were clinically normal. He had multiple, small discrete, soft, non-tender, bilateral inguinal lymph nodes.

INVESTIGATIONS

Baseline blood and urine analysis were within normal limit. Chest X-ray did not reveal any abnormality. Radiological evaluation of genitourinary

Figure 2 H&E stained picture of tuberculous granuloma under ×400 magnification (arrow).

system was unremarkable. Clinical suspicion was carcinoma of penis and an incisional biopsy was performed with a margin of healthy tissue. To our surprise, the histopathology report revealed chronic inflammation with multiple granulomas having central caseous necrosis and Langhans type of giant cells, suggesting tuberculosis (figures 2 and 3). Five consecutive early morning urine samples were negative for acid-fast bacilli. Mantoux test read after 72 h was non-reactive and urinary tuberculosis PCR was also negative. The serological test for syphilis and HIV was negative. The examination of his wife was also inconclusive for tuberculosis.

DIFFERENTIAL DIAGNOSIS

Penile cancer and infective ulcerative lesions of penis were the differential diagnosis.

Figure 3 H&E stained picture of tuberculous granuloma under ×100 magnification (arrow).

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Figure 1 Ulceroproliferative lesion on glans penis.

Figure 4 Healed lesion, 2 months after medical therapy resulting in meatal stenosis (arrow).

TREATMENT

The patient was started on short course, multiple drug therapy against tuberculosis as per category 1 of Revised National Tuberculosis Control Programme (RNTCP) for a duration of 6 months.

OUTCOME AND FOLLOW-UP

The lesion responded to the therapy within 2 weeks, and by 2 months there was complete healing of lesion (figure 4). The lymph nodes also disappeared. The patient was advised to visit our follow-up clinic monthly for the first 6 months during the course of antitubercular therapy and thereafter every 6 months for 2–3 years. The patient developed meatal stenosis after 2 months of antitubercular therapy. Meatotomy was performed (figure 5). The patient is now doing well in follow-up.

DISCUSSION

Tuberculosis of glans penis is rare and can be a primary lesion itself or secondary to an active focus at other sites in the body.² Primary glans tuberculosis may be acquired by sexual contact with patient suffering from genital tuberculosis or contamination from infected clothings.¹ Primary tuberculosis of glans has also been reported after intravesical BCG immunotherapy for bladder cancer.³ Tuberculosis of glans presents as superficial lesion, which may be difficult to differentiate from malignant tumours.¹ It may progress and involve the corpora cavernosa, leading to erectile dysfunction. Diagnosis of penile tuberculosis involves biopsy and molecular techniques, as culture of organism is usually negative. Mantoux test, chest radiography and intravenous urogram must be performed to rule out other focus of tuberculosis in the body. The evaluation of the female partner for genital tuberculosis has also been recommended.⁴ Tuberculosis of glans usually responds to short course, multiple drug therapy against tuberculosis.^{5 6} Patient should be followed

Figure 5 Peroperative picture of meatotomy.

closely until completion of chemotherapy for early management of any complication.

Learning points

- ▶ All ulceroproliferative lesions of the penis are not carcinoma.
- ▶ Penile tuberculosis responds well to medical therapy.
- ▶ Close follow-up is necessary as lesion heals with fibrosis.

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Competing interests None.

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