Bilateral Tyson's abscess as a complication of acute gonorrhea

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Abstract

Gonococcal infection is known for complications, if not treated promptly and adequately. Although Tysonitis and Tyson's abscess are mentioned in textbooks, only few reports are available as complications of gonorrhea. Bilateral Tyson's abscess in acute gonorrhea is a rare entity when compared to other complications of gonorrhea. The patient responded well to treatment. Unless the physician is familiar with this condition, it may be mistaken for periurethral abscess or even as paraphimosis. Hence, this case is reported to alert the physicians.

Key words: Complicated gonorrhea, partner management, Tysonitis, Tyson's abscess

Introduction

Infection of Tyson's glands, (Edward Tyson was an English physician and anatomist during 1649–1708), which are modified sebaceous glands, those secreting smegma and situate on either side of the frenum, is not a common complication in Gonorrhea.[1] In recent days, there is an upsurge in gonococcal infections in men and women. Infection of Tyson's glands may result in Tysonitis, causing a protruding cystic globoid enlargement either unilaterally or bilaterally. The cystic swelling will be filled with pus and will be tender.[2] Abscess of Tyson's glands appear as red, moderately tender swelling on the sides of frenal attachment. It may open on the surface and emit pus-containing Gonococci.[1] This can be easily mistaken for periurethral abscess which is deeply situated and is more likely to be present in the midline. Being a rare complication in the case of acute gonorrhea, that too with bilateral involvement of Tyson's glands is worth to be reported, as there is every chance for this likely to be missed. Hence, this case is being reported.

Case Report

A 36-year-old promiscuous married man, separated from his wife, had an exposure with a sex worker 10 days back and came with complaints of pain and swelling of genitals for the past 4 days. He accepted that he was having a burning sensation during micturition and discharge per urethra on interrogation. The patient's marital contact was 1 year back as his wife was away from him (Separated?).

On examination, the patient was having profuse, purulent white discharge per urethra. He was an uncircumcised individual who was having marked swelling and edema of the prepuce on the ventral aspect from 3 to 9 'O' clock position. Apart from this, he was also having two reddish and tender swellings, which emitted pus and situated on either side of the frenum of the prepuce [Figure 1]. No history of previous sexually transmitted infection was present with him.

His serological test for Syphilis and HIV were nonreactive. Gram-negative intracellular diplococci were present in the Gram stain preparation from the urethral smear [Figure 2]. As the patient was having complicated gonorrhea, an injection of ceftriaxone 500 mg was given intramuscularly for 5 days along with tablet azithromycin 1 g statum, followed by 500 mg once daily for 4 days as it was not possible to rule out chlamydial co-infection.[3] When the patient was reviewed on the 6th day, there was no urethral discharge or meatal inflammation. There was no discharge as well from Tyson's opening. There was no sign of inflammation on both sides except a very minimal swelling on the left side of the frenum [Figure 3]. The patient was asked to take the tablet of cefixime 200 mg twice daily and tablet of azithromycin 1 g for another 3 days as per the CDC (Centers for disease control and prevention) guidelines to continue the treatment till 2 days after it becomes normal in cases of complicated Gonorrhea.[4] As there was no recent marital contact and the patient's

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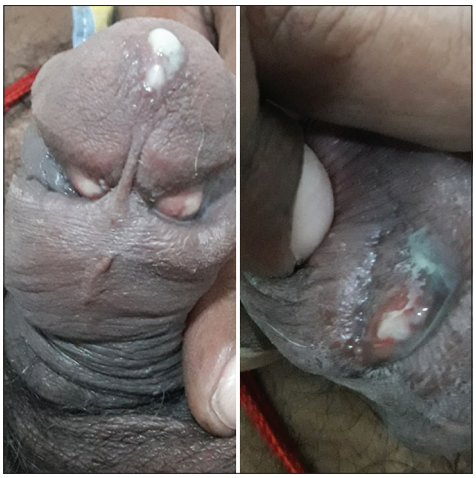

Figure 1: Urethral discharge with Tyson's abscess

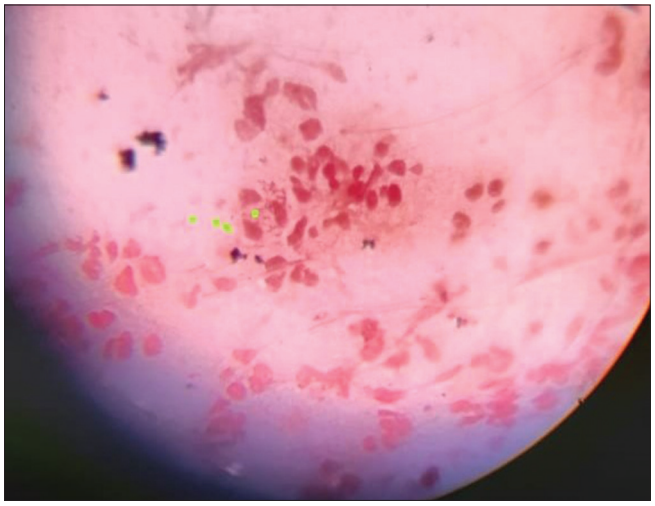

Figure 2: Gram-negative diplococci

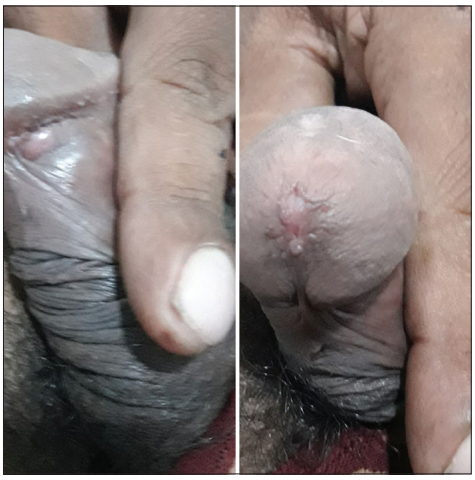

Figure 3: After treatment

wife separated and lives away from him; partner treatment was not advocated. Otherwise, partner treatment is very important in such cases.

Discussion

Although most of the textbooks[1,4] mentioned the involvement of Tyson's gland as a complication of gonorrhea, not many reports were seen. Fan *et al*.[5] reported 15 cases of Tysonitis during a span of 20 years. Fiumara reported a case of gonococcal tysonitis.[6] Gonococcal urethritis with bilateral Tysonitis and peri-urethral abscess also has been reported by Subramanian.[7] Needle aspirations or surgical drainage may be required in some cases for more rapid and complete resolution. In this case, without any invasive procedures, the individual responded well to the medical management. Tysonitis can also be caused by organisms other than gonococci such as Escherichia coli.[2] Murugan reported a case of Tysonitis due to a possible nonvenereal infection in the year 2018.[8] Almost all the cases responded well to the treatment including the above case.

Conclusion

What the mind does not know, the eyes will not see. As the bilateral involvement of Tyson's glands with abscess is a rare complication in gonococcal infection, one should not forget to look for and not to miss the diagnosis of this complication of gonorrhea. Inadequate treatment may lead to be a focus for reinfection or a source for the new infection in the partner and for other complications.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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