Case Report

Rhinosporidiosis of Male Urethra - Case Report of a Rare Disease

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Summary:
Rhinosporidiosis is a chronic granulomatous disease caused by the fungus commonly affecting anterior nares and nasopharynx. Other sites of involvement included the larynx, hard palate, vagina, vulva, and anus. It may occur very rarely at urethra.This disease generally acquired by bathing in ponds contaminated by animal feces.It is a benign condition where the organisms are limited to the lesion and regional lymph nodes. Adjacent tissues are not usually involved. The infection is very slow to develop with little discomfort; it is often difficult to ascribe age at onset. Males account for 70% to 90% of cases mostly from the rural environment. The lesion causes pressure and obstructive symptoms when they enlarge. Diagnosis usually confirmed by histopathology of excised mass.

Key word: Rhinosporidiosis, male Urethra

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Introduction:
Rhinosporidiosis is a granulomatous disease caused by the fungus *Rhinosporidium seeberi*. It is a benign condition where the organisms are limited to the lesion and regional lymph nodes. Aadjacent tissues are not usually involved. The lesion causes pressure and obstructive symptoms when they enlarge. Commonest sites of infection are the nose, followed by eyes and skin. Other sites include the larynx, hard palate, vagina, vulva, urethra and anus. In the urethra, the lesions are red, sessile or a pedunculated mass extending beyond the external urethral meatus. This may resemble, hemangioma, condolymata or a neoplasm[1–2]. Though it has a global distribution, 90% cases are from Asia, mainly from south India, Sri Lanka and Pakistan and less than 5% cases are from Africa and the western countries[2]. It is generally acquired by bathing in ponds contaminated by animal feces, but still there is no proven theory about the complete life cycle of the organism[3]. We describe a case of rhinosporidiosis involving male external urethral meatus causing obstructive LUTS.

Case report:
A male patient aged 54 years, presented with a protrusion of a redmass from the urethra during micturition. Patient also complaint of obstructive LUTS. No history of hematuria and fever. No significant family history. Pressing the glans penis, the tip of a fleshy red mass was seen. Ultrasonography of the penis suggested a mass in the fossa navicularis. The mass was removed after a ventral meatotomy with diathermy fulguration of the base. Cystoscopy did not show any other mass. Excised tissues send for

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histopathological study. Histopathology suggested urethral rhinosporidiosis. Follow-up Urethro-cystoscopy at 3 months, 6 months and 1 year failed to show any recurrent lesions.

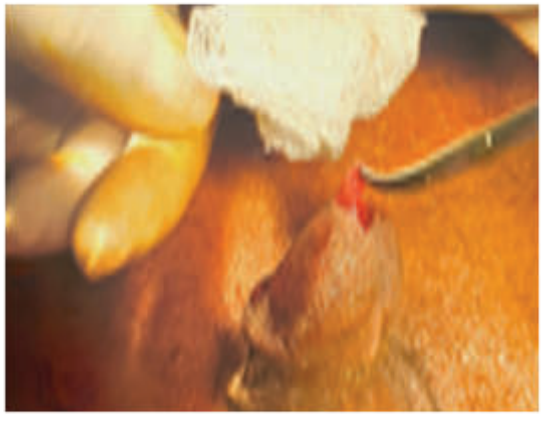

Fig-1: Rhinosporidiosis at male urethra

Discussion: The disease usually affects mainly the nasal mucosa (70%), nasopharynx (6%) and conjunctiva[4]. The first case of genitourinary rhinosporidiosis was reported by Dhayagudein 1941 from India in the urethra of a male patient[4]. It is not contagious and till now there is no evidence of transmission of the disease from man to man or animal to man[3,4]. Males are more commonly infected than females and the patients presented from the rural areas. Though the mode of infection is not clearly established, frequent bathing in contaminated stagnant water seems to be the cause of infection on a traumatized mucosa[4,5]. The question of sexual transmission was raised by Symmers of vulval rhinosporidiosis in a female and urethral rhinosporidiosis in a male, both of whom were sexual partners, but it has not been documented by any other author including in the present series. Usually, the lesion presents as a discrete, friable, painless, slow-growing polypoidal pedunculated or sessile mass mainly in the fossa navicularis, with a clinical suspicion of haemangioma or condolymata acuminata or lata. The penile involvement occurs as a polypoidal penile growth in the shaft penis or on the glans penis mimicking penile malignancy. Female urethral involvement is very rare and the first published report of two cases by Sasidharan[4].

Histopathology is the only way to diagnose the condition. Histology showed various stages of development from small trophic cysts to large sporangia.The overlying squamous epithelium is usually hyperplastic. There is infiltration of chronic inflammatory cells like lymphocytes, plasma cells and polymorphonuclear leukocytes. Giant cell reactions may be seen near the ruptured sporangia.

Surgical excision of the lesion with diathermy coagulation of the base is the only treatment in rhinosporidiosis[4,5]. Endoscopic resection and electro-fulguration of the base isan alternative treatment[5].

Fig-2: Follow up at 7 days

Follow-up is mandatory because of high recurrences with incidences of 3.6 to 25%[2,3]. The recurrence is mainly due to inadequate excision or reinfection[5].

Fig-3: Follow up 1 year

Conclusion: Although very rare but Rhinosporidiosis should kept in differential diagnosis when patients presents with discrete, polypoidal pedunculated or sessile mass mainly in the fossa navicularis of male urethra.

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