Recurrent Disseminated Cutaneous Rhinosporidiosis - Where is the End?

Chandrakala C, Tharini GK

From the Department of Dermatology, Government Villupuram Medical College Hospital, Villupuram, Tamil Nadu, India.
E-mail: cckkaarkuzhali@gmail.com

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Sir,
Rhinosporidiosis is a chronic granulomatous disease caused by Rhinosporidium seeberi, commonly affecting the mucosa of nose, nasopharynx, and soft palate, less commonly the conjunctiva, lacrimal sac, and maxillary sinus. Clinically, it presents as a red polyoidal lesion in the mucosa. It can occur in different morphological patterns in the skin.

A 60-year-old male presented with a red friable lesion on the left side of the forehead, crusted plaques on the right forearm and right leg for 2 months. He was operated for nasal rhinosporidiosis and swelling near the left eye 7 years ago. On examination, there was a red friable polyoidal lesion on the left side of the forehead just above the eyebrow and on the right side of the ala of nose [Figure 1a and 1b]. A crusted plaque was noted on the extensor aspect of the right forearm and crusted nodular lesion on the right leg [Figure 1c and 1d]. He also had nodules near the left lower eyelid. Scarring was noted at the previously operated site near the left lower eyelid [Figure 1a]. Regional lymph nodes were not enlarged. Scraping and 10% potassium hydroxide (KOH) mount of the lesion showed sporangiospores [Figure 2a]. Complete hemogram and other blood investigations were within normal limits. Serology for HIV was non-reactive. His chest X-ray and ultrasound abdomen were normal. He was referred for excision biopsy of the skin lesions. Histopathological examination of excision biopsy specimens showed mature and immature sporangiospores and numerous endospores against inflammatory background [Figure 2b]. Dermoscopy was not done for the skin lesions. He was prescribed tablet dapsone 100 mg daily for 6 months. During dapsone therapy, he presented with a red friable lesion on the palmar aspect of the left ring finger and a verrucous growth on the dorsum of the right second toe [Figure 3a and 3b] and the lesions were excised. The patient took dapsone for 3 months, and he stopped the treatment by himself. One year later, rhinosporidiosis recurred at the thenar eminence of the left palm as a red friable lesion and a verrucous lesion in the medial aspect of the right arm [Figure 3c and 3d]. After eight months, he developed a crateriform lesion with central polyoidal growth over the left forearm and a nodular lesion over the chest [Figure 4a and 4b]. Excision biopsy of all the lesions showed sporangiospores on histopathological examination. After excision of the lesions, the patient was advised to take Dapsone 100 mg daily. Our patient had multiple cutaneous recurrences with varied morphological patterns in spite of intermittent dapsone therapy.

The four common clinical types of rhinosporidiosis are nasal, ocular, disseminated, and primary cutaneous forms; among these, the primary cutaneous type is very rare.[1] Cutaneous rhinosporidiosis commonly occurs with primary lesions in the nose, nasopharynx, or lacrimal apparatus. Four different modes of spread have been described for rhinosporidiosis which include autoinoculation, hematogenous dissemination, lymphatic spread, and direct inoculation into the skin.[2] Unless there is a history of primary nasal or ocular rhinosporidiosis, skin lesions may be overlooked as they occur in different morphological forms. The various cutaneous forms described include lesions resembling pyogenic granulomas,[3] furuncles, echyma, lipomas, soft tissue tumors,[4] tuberculosis verrucosa cutis, viral warts, donovanosis, subcutaneous nodules, cutaneous horn,[5] and subcutaneous giant masses. Surgical excision followed by cauterization is the preferred treatment method for cutaneous rhinosporidiosis.[5] The cutaneous recurrences in immunocompetent individuals are probably due to inadequate excision and autoinoculation. Dapsone is used as an adjuvant to surgical excision and it acts by inhibition of maturation of sporangiospores and increases fibrosis in the stroma.[6]

The different morphological forms of skin lesions occurred in our patient were red friable growth,
Correspondence

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.

References
1. Mandal SK, Dutta S, Roy S. Cutaneous Rhinosporidiosis. Indian J Dermatol 2000;45:78-80.
2. Nayak S, Acharjya B, Devi B, Sahoo A, Singh N. Disseminated cutaneous rhinosporidiosis. Indian J Dermatol Venereol Leprol 2007;73:185-7.
3. Sahu B, Sahu P, Puhan MR. Disseminated cutaneous rhinosporidiosis: A polymorphic presentation in an immunocompetent patient. Indian J Dermatol 2015;60:218.
4. Date A, Ramkrishna B, Lee VN, Sundraraj GD. Tumoral rhinosporidiosis. Hiatopathology 1995;27:288-90.
5. Kumari R, Nath AK, Rajalakshmi R, Adityan B, Thappa DM. Disseminated cutaneous rhinosporidiosis: Varied morphological appearances on the skin. Indian J Dermatol Venereol Leprol 2009;75:68-71.
6. Job A, Venkateswaran S, Mathan M, Krishnaswami H, Raman R. Medical therapy of rhinosporidiosis with dapsone. J Laryngol Otol 1993;107:809-12.

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Crusted plaque, nodule, verrucous lesion, and keratoacanthoma-like crateriform lesion. This case is reported for the occurrence of recurrent cutaneous lesions in various morphological patterns along with keratoacanthoma-like skin lesion, which has not been reported in the literature so far.