Primary cutaneous rhinosporidiosis: an unusual lesion with an unusual presentation

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DESCRIPTION

A 60-year-old man presented with painless progressively enlarging multiple cutaneous nodules for the past 6 months. On examination, multiple nodular cutaneous lesions were noted over the anterior abdominal wall, right popliteal region, right arm, nape of neck and left loin area (figures 1–5).



Figure 1 Nodular lesion over the anterior abdominal wall (the incisional biopsy site is seen in the inset).



Figure 2 Nodular lesion in the right popliteal area.

Plaque-like lesions were noted over the left arm (figure 4). Nasopharyngeal and ophthalmological evaluations were normal. Routine haematological and biochemical parameters were within normal limits. Incisional biopsy was performed. Histopathological examination showed multiple sporangia in different stages of development and, in the inset, spores within sporangia can be seen (figure 6). However, fine-needle aspiration would have been a less invasive procedure. Subsequently, the patient underwent excision



Figure 3 Nodular lesion over the right arm.



Figure 4 Nodular lesion and plaque lesion over the nape of the neck and the left arm, respectively.



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Images in...



Figure 5 Nodular lesion over the left loin.

of all lesions followed by dapsone therapy. He is asymptomatic at 6-month follow-up with no evidence of recurrence.

Rhinosporidiosis is a chronic granulomatous disease caused by *Rhinosporidiosis seeberi*. It belongs to a group of protists known as Mesomycetozoa. It is usually acquired through contact with contaminated freshwater sources. The most commonly involved site is the nasopharynx. Nasopharyngeal lesions present as

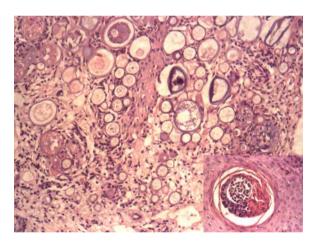


Figure 6 Photomicrograph showing multiple sporangia in different stages of development (×100) and spores within sporangia can be seen in the inset (×200).

pedunculated or sessile vascular polyps, which may extend into the nasal cavity.² Other less common sites of infection are the eyes, aerodigestive tract and skin. In contrary to normal presentation of cutaneous rhinosporidiosis, which is associated with either nasopharyngeal or ocular lesions, our patient presented with an isolated cutaneous involvement. Cutaneous rhinosporidiosis may manifest as satellite lesions, generalised lesions with nasopharyngeal disease or as exclusively cutaneous disease (also called primary cutaneous rhinosporidiosis).³ Fine-needle aspiration cytology or biopsy is helpful in diagnosing the disease and differentiating it from various other cutaneous diseases such as tuberculosis, warts and granuloma pyogenicum. Excision is the treatment of choice. Antibiotics, including dapsone, ciprofloxacin and ampthotericin-B, as well as antifungal agents, have been used; of these, dapsone is found to be the most effective.

Learning points

- ► Cutaenous rhinosporidiosis may present as varied cutaneous lesions; the clinician should have a high index of suspicion for appropriate diagnosis. Although nasopharyngeal disease is the most common presentation, isolated cutaneous rhinosporidiosis (primary cutaneous rhinosporidiosis) should also be considered.
- ► Rhinosporidiosis can be diagnosed by fine-needle aspiration cytology or biopsy.
- Excision is the treatment of choice.

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