Candidal abscess in a second primary neoplasm of the neopharynx

O. OLARINDE, F.R.C.S., M. G. WATSON, F.R.C.S.

Abstract

A candidal abscess is a known complication of disseminated candidiasis, particuarly in immunocompromised patients. We report a second primary growth in the neopharynx brought to light by a candidal abscess in a non-immunocompromised patient.

Key words: Abscess; Candida albicans; Nasopharynx

Case report

A 58-year-old man presented with an acute painful midline cervical swelling that had progressively worsened over four days and was associated with worsening previously background dysphagia. Seventeen years before this he had had a total larvngectomy for a larvngeal cancer. A tracheostomy and radiotherapy for the same disease had preceded this. He had had some degree of dysphagia since his laryngectomy due to a stricture of the hypopharynx, that had required dilatation on five occasions. On each of these occasions the stricture was dilatable with a 38F dilator and there was no sign of tumour recurrence. His weight had remained relatively stable during this period up and until about four months before the acute presentation with the painful neck swelling. Three years before he developed this abscess he had tried to use a Blom-Singer valve but had discarded the valve allowing spontaneous healing of the tracheo-oesophageal fistula.

Diagnostic and therapeutic aspiration of the swelling yielded thick brown pus, that on microscopy showed yeast cells. Candida albicans was isolated on culture. Routine haematological investigations did not suggest that he was immunocompromised. He was treated with nystatin topically and fluconazole through a nasogastric tube, which had been passed for feeding due to worsening dysphagia. He made a good recovery on the antifungal agents. A barium swallow performed at this time showed a 4–6 cm concentric stricture in the cervical oesophagus that was also pushed to the right side. A pharyngoscopy showed a fibrosed stenosis, which this time could not accept a dilator. Biopsies were taken and histology revealed moderately differentiated squamous cell carcinoma. An magnetic resonance image (MRI) scan showed a nodular plaque of tumour extending from the level of the tongue base to the level of C6 (Figure 1). He subsequently had a total neopharyngectomy, right selective neck dissection (levels II, III and IV) and a free jejunal graft reconstruction. (At surgery a right-sided lymph node had been identified on neck palpation.) Normal swallow had returned within three weeks of surgery.



Fig. 1

Saggital magnetic resonance imaging scan showing a nodular plaque of tumour within the pharynx extending from the base of the tongue (C3) to C6. Note the fatty change in the marrow of the vertebral bodies of C3 to C6 as a result of previous radiotherapy.

Discussion

Candidiasis is known to present as an opportunistic infection in immunocompromised or debilitated patients. Diagnosis is by the demonstration of yeast cells in the infected material and culture of any of the candidal species. Localized candidal abscesses are rare in the cervical region, more so in patients who are not immunocompromised. Fornadley *et al.*¹ reported the only case of cervical candidal myositis that presented as a

From the Department of Otolaryngology, Doncaster Royal Infirmary, Doncaster, UK. Accepted for publication: 10 July 2000.

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discrete neck mass and later progressed to become an abscess in a patient with acute lymphocytic leukaemia. Our report, however, is that of a localized cervical candidal abscess in a patient who was not immunocompromised and it was associated with a second primary neoplasm. The abscess, weight loss and dysphagia prompted further investigations which revealed the diagnosis of a second upper aero-digestive tract malignant neoplasm 17 years after successful treatment of the first tumour.

While systemic candidiasis is not uncommon when immunity is depressed the presence of a candidal abscess is ominous. The use of radiological investigations may be helpful in diagnosis before a frank abscess has developed to allow prompt treatment to start. Prompt treatment of any candidal abscess after aspiration is required with antifungal agents for an appropriate length of time (at least 14 days). There is no consensus on the most appropriate treatment for such abscesses but the decision on which drugs and dosages to use should be based on the host defence status of the patient, underlying conditions, predisposing factors, results of blood cultures and the causative *Candida* species – non-*Candida albicans* species vary in their susceptibility to fluconazole.² Commonly used agents are fluconazole and amphotericin B. After making

the diagnosis of a candidal abscess, predisposing factors should always be sought for and addressed. In this case it was a second primary malignancy that was promptly managed surgically with a good functional result.

References

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Address for correspondence: Mr Olawale Olarinde, F.R.C.S., 17 Keel Close, Barking, Essex IG11 0XR, UK.

E-mail: wfolarinde@ukgateway.net

Mr O. Olarinde takes responsibility for the integrity of the content of the paper.
Competing interests: None declared