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CASE REPORT

Primary nasal septal acinic cell carcinoma

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ABSTRACT

BACKGROUND. Acinic cell carcinoma (ACC) is a rare malignant salivary gland tumour. It is of a low-grade type. The commonest site involved is the parotid gland. ACC is not common in minor salivary glands; this tumour type mainly arises in the oral cavity.

CASE REPORT. We present an 84-year-old Malay man with spontaneous, self-limiting, left-sided epistaxis for 2 days. He also had progressive left-sided nasal blockage. There was no hyposmia, blurry vision or headache. He had underlying hypertension. The clinical examination showed he was normotensive. There was no external nasal deformity. The anterior rhinoscopy demonstrated a fungating irregular mass filling up the left nasal vestibule. There was no neck node. The computed tomography showed a tumour localized in the nasal cavity. The biopsy showed features of acinic cell carcinoma. We proceeded with left lateral rhinotomy and wide excision. Intraoperatively, we discovered that the tumour aroused from the nasal septum and part of the septum had to be sacrificed for margin clearance. Currently, he is on routine surveillance and tumour-free.

CONCLUSION. We highlighted the importance of recognizing nasal acinic cell carcinoma and the fact that early biopsy is important as surgery provides a good prognosis even in the extreme age group.

KEYWORDS: non-Hodgkin lymphomas, nasal-type lymphoma, Epstein-Barr virus.

INTRODUCTION

Acinic cell carcinoma (ACC) is an uncommon malignant salivary gland tumour. It rarely involves minor salivary glands. The parotid gland is the most common salivary gland affected by this disease. The radiological characteristics of ACC are similar to benign tumours. The role of tissue biopsy is important for the diagnosis to differentiate from other diseases.

CASE REPORT

An 84-year-old Malay man presented with left-sided epistaxis during the previous 2 days, which resolved spontaneously. He had progressive left-sided nasal blockage. Recently, he also began to notice a growing mass in his left nostril. The mass remained painless. There was no hyposmia, blurry vision or headache. He has no weight loss and no family history of malignancy.

He had underlying hypertension.

The clinical examination showed broadening of the left nasal ala with good tip and supratip support. A huge fungating irregular mass could be seen filling up the left nasal vestibule and it appeared to be connected to the nasal cavity (Figure 1).

There was no neck node. The otoscopic examination showed a clear tympanic membrane.

The histopathologic examination (HPE) showed an acinic cell carcinoma (Figure 2).

The cranio-facial CT scan demonstrated a large homogeneously enhancing soft tissue mass seen in the left nasal cavity, measuring 4.0cm x 1.4cm in diameter. It displaced the nasal septum to the right. The paranasal sinuses were clear with no bony erosion seen. The floors of the anterior and the middle cranial fossa were intact. There were no significant neck nodes seen (Figure 3).

We proceeded with left lateral rhinotomy and wide excision. Intraoperatively, there was a reddish

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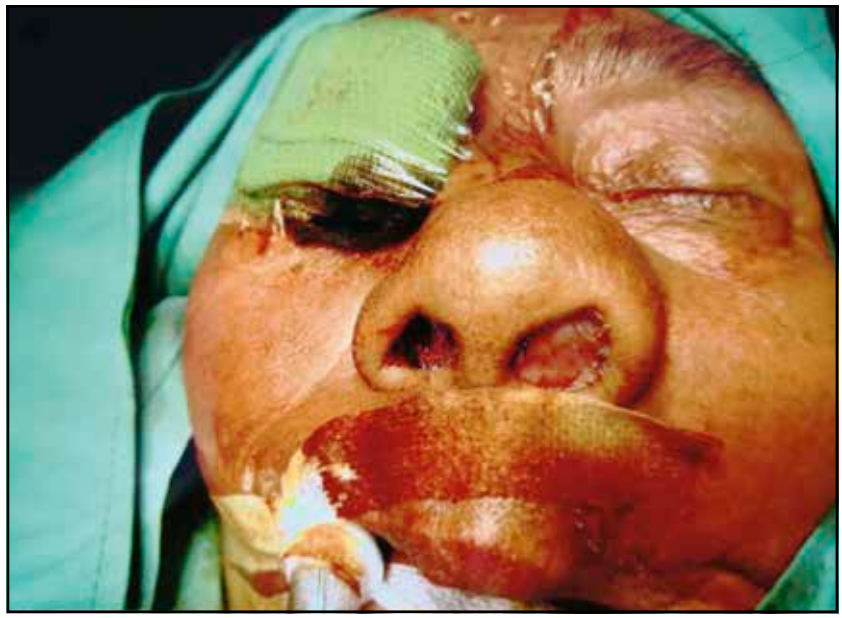

Figure 1 Fleshy mass filling up the left nasal vestibule.

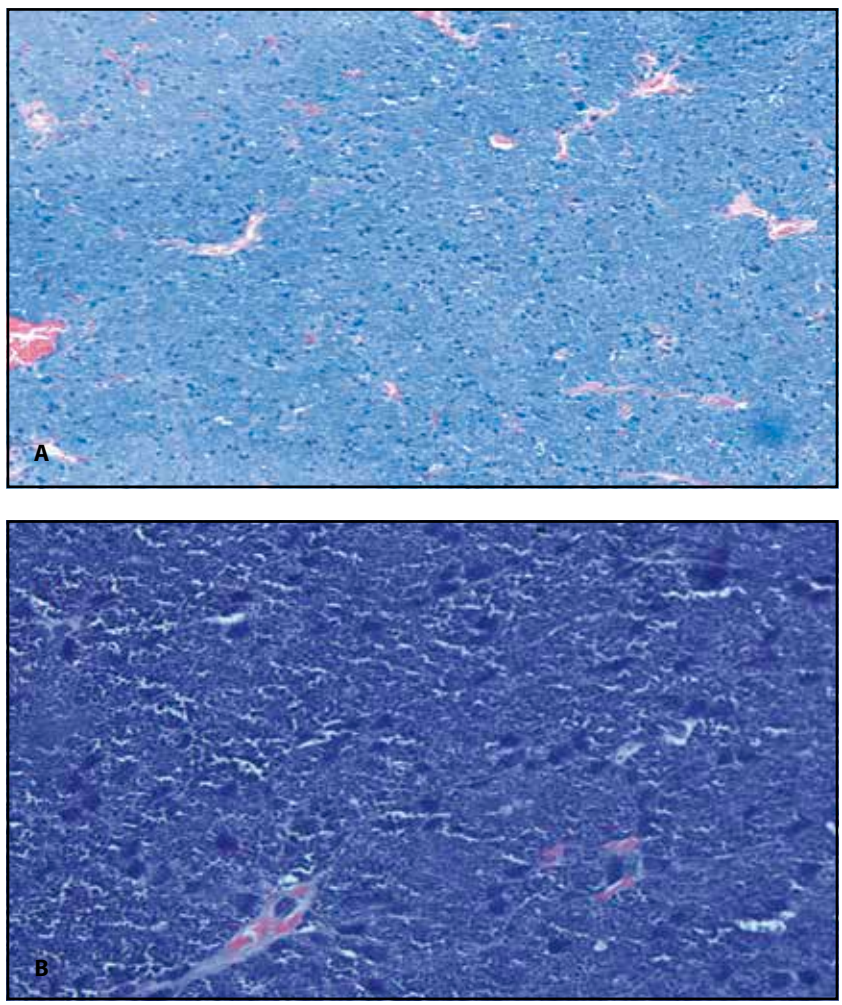

Figure 2 The histopathological examination showed tumour tissue partly lined by stratified squamous epithelium. It is composed of malignant cells arranged in sheets and nests with lobular pattern. The malignant cells exhibit large polygonal cells with basophilic granular cytoplasm and round eccentric nuclei. There are numerous vacuolated cells containing clear cytoplasm and forming a microcystic pattern. (**B**) Similar image to (**A**) at x40 magnification.

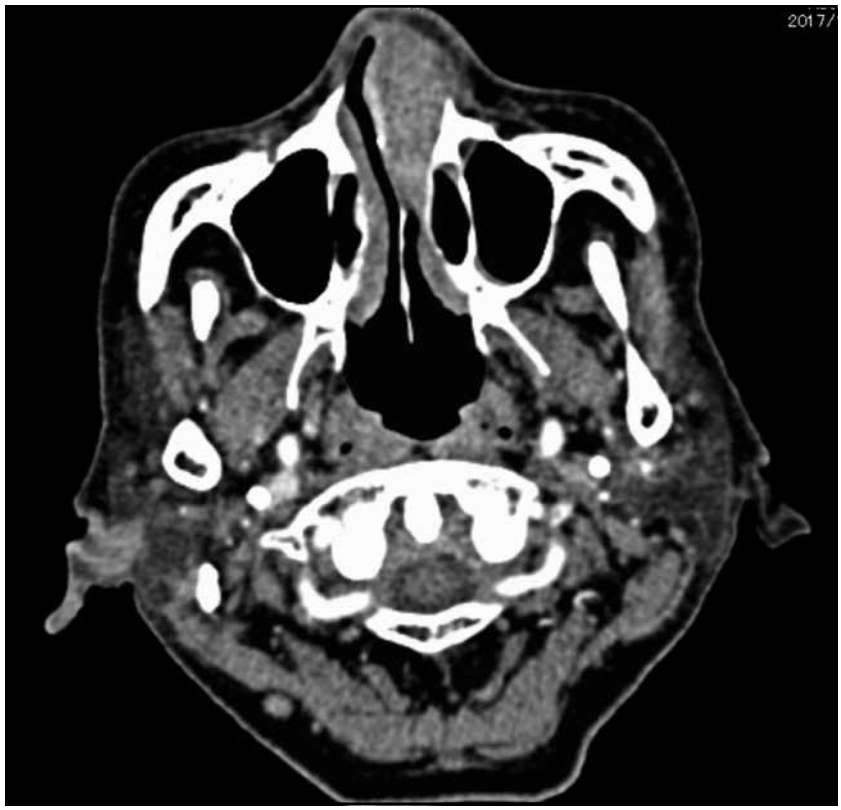

Figure 3 Axial CT scan demonstrates a soft tissue density filling up the anterior part of the nasal cavity extending to the nasal vestibule.

lobulated mass which measured 3cm x 4cm. The tumour base was attached to the ipsilateral nasal septum mucosa. The tumour was excised in toto. There was an iatrogenic perforation of the nasal septum with the aim to create a margin clearance.

He is on monthly surveillance and has been tumour-free for 1 year now.

DISCUSSIONS

Acinic cell carcinoma (ACC) is an uncommon malignant epithelial neoplasm of the salivary glands that mainly affects the parotid gland. According to World Health Organization (WHO), the tumour cells of ACC exhibit some serous acinar cell differentiation characterized by cytoplasmic zymogen secretory granules as well as salivary ductal cells. ACC commonly affect females[1]. ACC is the third most common malignant salivary gland tumour, following mucoepidermoid carcinoma and adenocarcinoma NOS (not otherwise specified) in females[2].

ACC was initially believed to be a benign disease. In 1953, Buxton discovered that ACC has the malignant potential to metastasize and recur locally[3]. ACC can be divided by different grades which predict their malignant behaviour. Low grades ACC are well differentiated lesions and most closely resembling a normal salivary gland with lobular architecture. High grades ACC are poorly differentiated lesions resembling the early phases of embryonic salivary acini[4]. The role of tissue biopsy is important for the diagnosis to differentiate from other diseases.

The radiological characteristics of ACC are similar to benign tumours. However, imaging is important in the evaluation of tumour size and involvement of neighbouring structures.

5-year survival rates of ACC are more than 90%[4]. Older age has been associated with decreased survival[4]. Neskey et al. (2013) has linked the poorer outcome at older ages to the development of distant metastases[5].

Complete surgical excision is the treatment of choice for ACC. The factors determining the extent of surgery are the primary location and other areas which are involved[6]. Radiation therapy has been used for patients with recurrent disease, high-grade histologic findings, regional disease or positive surgical margins[5]. However, studies have shown that patients receiving radiotherapy for ACC did not improve recurrence rates and had a diminished overall survival[4, 5].

CONCLUSIONS

ACC is a malignant tumour generally considered benign as it can be considerably cured with surgical excision, even in the older age group. Therefore, an early tissue diagnosis is very important for early disease recognition.

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