MALIGNANT MELANOMA OF THE NASAL CAVITY - A CASE REPORT

Swapan KR. Ghosh,* Arindam Patra,** Saumyajit Datta,*** Alok Banta****

Abstract: Mucosal melanoma of the nasal cavity is a rare tumour. Here we have reported a case of 54-year-old male patient presented with the black mass coming out from right nasal cavity and occasional slight bleeding from the mass. The tumour was excised by lateral rhinotomy. The surgery was followed by radiotherapy.

Keywords: Malignant melanoma, Nasal cavity Malignant melanoma of the nasal cavity- a case report

INTRODUCTION

Invasive tumours containing abnormal melanocytes are termed malignant melanoma. Malignant melanomas of nasal cavity and sinuses are extremely rare tumours. The incidence is about 3.6–4% of all nasal tumours.⁽¹⁾ Clinically, most patients display initial nonspecific symptoms of unilateral nasal obstruction or epistaxis. It has a poor prognosis. The 5 years survival varies between 10 to 40% and the median survival is 21–24 months.⁽¹⁾ Extensive local invasion and distant metastasis to other organs may occur. The usual treatment of choice is radical excision. Radiotherapy and chemotherapy appear to have little effect. Some of the contributory reasons for their poor prognosis are the delay in detection and in accurate histological diagnosis, the frequent injudicious therapy and the difficulties in precise removal of the tumour.

CASE REPORT

A 54-year-old male presented with complaints of mass coming out from right nasal cavity and occasional slight bleeding from the mass. On examination there was a fleshy, black, friable mass in the right nostril, Malignant melanoma of the nasal cavity – a case report which was completely blocking the nasal passage and bled slightly on touch. The septum was deviated to the left by the mass.

The patient was operated 5 years back for the same complaint. At that time Caldwell-Luc operation was done and a blackish mass was removed from the right nasal cavity and the right maxillary antrum. The histopathological report was malignant melanoma. The patient was not treated by postoperative radiotherapy. After 5 years there was recurrence and the black mass was gradually coming out from the right nasal cavity. CT scan revealed an irregularly marginated soft tissue density mass involving right nasal cavity and medial part of right maxillary sinus.

The mass was excised meticulously by lateral rhinotomy approach. The patient was treated by postoperative radiotherapy. During 6 months follow-up period there was no recurrence of the disease. Histopathological examination of the mass revealed melanocytes in the submucosa. The stroma contained large number of spindle shaped cells with hyperchromatic nuclei. This confirmed the diagnosis of malignant melanoma.

DISCUSSION

Mucosal melanomas of the head and neck are, in general, rapidly lethal neoplasms. Sinonasal melanomas represent about 0.6-0.7% of all melanomas of head and neck.⁽²⁾ In the head and neck, the commonest sites for melanoma are oral cavity (49%), followed by sinonasal involvement (40%) and pharynx (11%). The common site within the nose is the nasal septum, followed by the inferior and middle turbinates.⁽³⁾ However, it is often difficult particularly in large lesions to determine the exact site of origin. The tumour occurs between 50-70 years of age and is slightly more common in males than females.⁽⁴⁾ Most nasal mucosal melanomas arise from the mucosa of the septum and the lateral nasal wall rather than from the sinuses. Malignant melanomas of the nasal cavities and sinuses are characterized by early and repeated recurrences. The overall prognosis and survival rates are poor. About one half of patients die within 3 years; of those alive at 5 years, 50% may have residual disease. Virtually all patients eventually die because of persistent local recurrence and spread of the disease. The course of the disease is variable, depending on the host-tumour relationship. Some patients succumb to the disease within a few weeks or months of presentation despite aggressive surgical removal, others have a long disease-free period followed by dramatic recurrence.⁽⁵⁾ In this case there was recurrence 5 years after the first operation.

The cause of melanoma in solar-hidden mucosa is unclear, although smoking may have a role in activation of pre-existing melanocytes leading to melanogenic metaplasia.⁽⁶⁾ Nasal and paranasal sinus melanomas usually are advanced at the time of discovery. Metastases are often found at initial presentation. Involvement of regional lymph nodes strongly suggests distant spread, which is often not preceded by lymphatic spread. For both cutaneous and mucosal melanomas, the single most powerful predictor of survival is the status of regional lymph nodes.⁽⁶⁾ In the present case there was no regional metastasis. The preferred treatment for sinonasal mucosal melanoma is wide local excision with tumour free margins. Different surgical procedures like lateral rhinotomy, craniofacial resection, maxillectomy and total rhinectomy are done depending on the extent of the lesion. Due to their late presentation clearance is often inadequate.⁽¹⁾ AU Chen M et al⁽⁷⁾ stated that surgery is the first choice for this disease and post-operative radiotherapy gives a better result.

Fig. I : Malignant melanoma in right nasal cavity.

Fig. II : CT Scan showing mass involving right nasal cavity and medial part of right maxillary sinus.

Fig. III: Microphotograph showing spindle cells with hyperchromatic nuclei and melanocytes (H & E X 60).

AU Gilligan D et al ⁽⁸⁾ reported absolute local control by radiotherapy alone achieved in 61% of cases. Radical radiotherapy for melanoma of this site can be justified because of the local control achieved, low treatment morbidity in patients who are typically elderly and the propensity to disseminated disease. Cody, 1999 ⁽⁹⁾ stated that surgical resection is the best treatment, although its effectiveness is questionable. There is high incidence of local recurrence even with fresh frozen section to ensure complete removal. More radical surgery, including removal of the eye, palate, or external portion of the nose, may not significantly lessen the incidence of local recurrence. In the present case there was local recurrence 5 years after the first operation. During the second operation the mass was removed by lateral rhinotomy approach. Post-operative radiotherapy was done. There was no recurrence in the 5 months follow-up period.

ACKNOWLEDGEMENT

The authors are thankful to the Principal, Medical College, Kolkata for permitting to publish this paper.

REFERENCES

1. Mundra RK, Sikdar A: Endoscopic removal of malignant melanoma of the nasal cavity, *Indian J Otolaryngol Head Neck*, 2005; 57: 341-43.
2. Holdcraft J, Gallagher X: Malignant melanomas of the nasal and paranasal sinus mucosa, *Ann Otol Rhinol Laryngol*, 1969; 78: 1-20.
3. Conley JJ: Melanomas of the mucous membranes of the head and neck, *Laryngoscope*, 1989; 99: 1248-54.
4. Pantazopoulos PE: Primary malignant melanoma of the nasal fossa, *Ann Otol Rhinol Laryngol*, 1965; 74: 604-610.
5. Lund VJ, Howard DJ, Harding L, Wei W: Management options and survival in malignant melanoma of the sinonasal mucosa, *Laryngoscope*, 1999; 109: 208-11.
6. Batsakis JG, Suarez P, El-Naggar AK: Mucosal melanomas of the head and neck, *Ann Otol Rhinol Laryngol*, 1998; 107: 626-30.
7. AU Chen M, Lin Z, Tang X: Malignant melanoma of nasal cavity: report of 24 cases, *Chinese Journal of Otolaryngol*, 1995; 30: 246-7.
8. AU Gilligan D, Slevin NJ: Radical radiotherapy for 28 cases of mucosal melanoma in the nasal cavity and sinuses, *British Journal of Radiology*, 1991; 64: 1147-50.
9. Cody DT, Lawrence WD: Neoplasms of the nasal cavity, Cummings CW, Fredrickson JM, Harker LA, et al, eds. *Otolaryngology Head Neck Surgery* (Mosby), 3rd ed., 1998; Vol.2: 896.

Address for correspondence

Dr. Swapan Kr. Ghosh,
Flat- 101B, Girikunj, 390,
S.N.Roy Road, Kolkata- 700038
E-mail: sawnkg3k4@rediffmail.com