

A Rare Case of Nasopharyngeal Carcinosarcoma

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SUMMARY

Nasopharyngeal carcinoma is known to be the commonest tumour of the nasopharynx. However, the incidence of nasopharyngeal carcinosarcoma is extremely rare. Carcinosarcoma has been reported to be aggressive in nature and therefore early diagnosis and prompt treatment is important. We report a young lady who was diagnosed with nasopharyngeal carcinosarcoma in our centre. She presented with only 2 weeks history of nose block and was noted to have a mass occupying the nasopharynx with neck metastasis. She underwent panendoscope and biopsy with radical radiotherapy.

KEY WORDS:

Nasopharyngeal Carcinosarcoma, Head And Neck Cancer, True Mixed Malignant Tumour, Sarcomatoid Carcinoma

INTRODUCTION

Carcinosarcoma is a malignant tumour comprises of a mixture of malignant epithelial tissues and connective tissues. It has been reported to be more common in males¹. Like most other tumours, carcinosarcoma is associated with smoking, alcohol consumption and previous history of radiation exposure¹. Larynx constitutes about 50% of reported carcinosarcoma of head and neck but despite this, the incidence of carcinosarcoma is only 1% of all malignant laryngeal tumours¹. It is also present in the salivary glands, tongue, lower gingiva, and floor of the mouth in the head and neck region. Other reported cases of carcinosarcoma also include the bladder, uterus, lung and others. Almost 70 cases of carcinosarcoma has been reported of which about 40 cases were discovered in 1993².

CASE REPORT

A 29 year old Malay lady was referred to us with the chief complaint of nose block for 2 weeks duration. Initially the nose block affected the right nostril and then the left nostril a few days later. This symptom was associated with rhinorrhea, epistaxis, sneezing, ear block and also tinnitus. There was no hearing loss, voice change, no dysphagia or loss of weight or loss of appetite. There was no family history of malignancy. She is married with no children at the moment and has been working as a promoter in a shopping complex.

On examination, there was a mass occupying whole of the posterior nasal space. Her vocal cords appeared equal and mobile and there was no obvious mass at the pyriform fossa nor the post cricoid region. Both external auditory canal and tympanic membrane appeared normal. There was no neck node palpable.

Subsequently this patient was planned for CT (computed tomography) of the brain,neck,thorax,abdomen and pelvis which showed posterior nasopharyngeal mass measuring 2.7cm X 3.7cm X 2.9cm and level IIb cervical lymph nodes bilaterally (largest measuring 1.4cm X 1.2cm on the right). Fossa of Rosenmuller (FOR) were not obliterated. The parotid, submandibular and thyroid gland were normal. There was no metastasis or mass noted at the thorax, abdomen and pelvis. The MRI (magnetic resonance imaging) of the base of skull and neck findings were consistent with the CT scan findings and it showed enhancing lesion in the nasopharynx. Tonsils are mildly enlarged with bilateral cervical lymphadenopathy. There was no evidence of intracranial infiltration. Patient was diagnosed to have nasopharyngeal tumour with neck metastasis at this stage.

Without further delay, this patient underwent panendoscopy and biopsy. Intraoperative findings showed bluish vascular mass at the posterior nasal space which appeared pedunculated originating from right FOR. Major bulk of the mass was excised and the surrounding area debrided. Her post operative recovery was uneventful.

Histopathology result showed that the mass was consistent with carcinosarcoma. The sections show fragments of tumour tissue composed of sarcomatous element of diffusely infiltrated spindle shaped to plump pleomorphic nuclei, prominent nucleoli and eosinophilic cytoplasm. Mitoses with abnormal figures are easily seen. The carcinoma component of the neoplastic cells are positive for MNF 116 and EMA. Vimentin and Actin are positive for the sarcomatous elements. S100, CD34, CD68, LCA and CD30 are negative.

Patient was then referred to the oncology department. She is underwent 33 Grays of radical radiotherapy. A surveillance scope 2 months after completion of radiotherapy was done and it showed that the posterior nasal space is clear and there was no neck node palpable.

DISCUSSION

This patient is a young lady with no known risk factors present. She denied any history of smoking, alcohol consumption or previous history of radiation exposure. She presented to us only with 2 weeks history of nose block and she was already noted to have posterior nasal mass with neck metastasis. This reflects the aggressive nature of carcinosarcoma.

Malignant mixed tumours are classified as 3 distinct histological types: carcinoma ex pleomorphic adenoma, benign metastasizing pleomorphic adenoma and

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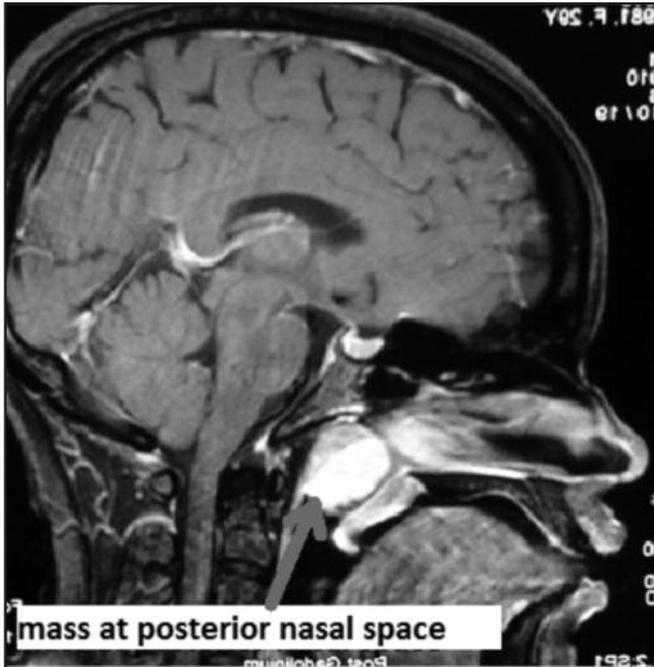


Fig. 1: MRI base of skull and neck of patient showing mass at the posterior nasal space.

carcinosarcoma³. Carcinosarcoma is a rare neoplasm which comprises of carcinoma and sarcomatous elements and they invariably metastasize together³. The differentiation of the carcinomatous element of head and neck tumour has been reported to be predominantly alone the adeno lines while the most common sarcomatous element was found to be chondrosarcoma³. It is important to have adequate sample taken for an accurate diagnosis as insufficient sample may lead to erroneous diagnoses of squamous cell carcinoma, adenocarcinoma, undifferentiated carcinoma, and adenosquamous carcinoma⁴.

The combination of surgery and radiotherapy seems to be superior than resection alone while the role of chemotherapy is still unclear². The prognosis of carcinosarcoma is poor with median survival of 10 months after diagnosis². Amongst the carcinosarcoma of the head and neck, laryngeal sarcomatoid tumours seem to have better prognosis compared to extralaryngeal tumours¹. A study done in Canada showed that all recurrences were detected within 30 months from diagnosis with an overall survival advantage for patients with early-stage disease, patients with extralaryngeal presentations, and patients treated with surgery⁵. Therefore, at this stage, it is vital to have close monitoring and follow up of this patient with surveillance scope and imaging to ensure that recurrence of tumour is detected early and prompt treatment is strategized for her.

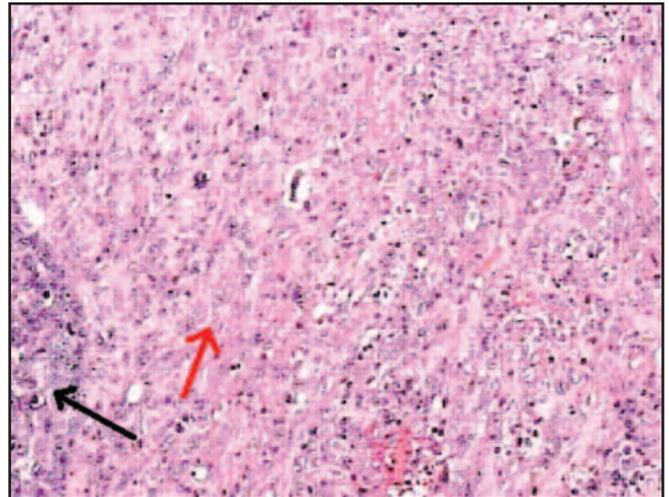


Fig. 2: Histopathology of the patient showing elements of carcinoma (black arrow) and sarcoma (red arrow).

CONCLUSION

Carcinosarcoma of the head and neck tumour, although rare; is not to be taken lightly by health professionals. It is known to be very aggressive in nature and has very poor prognosis. Therefore, early diagnosis and prompt treatment is essential to improve outcome and survival rates of these patients. Up to date, more research regarding the treatment modalities for carcinosarcoma is still needed.

REFERENCES

1. Hagr A, Alabdulhadi K, Sarcomatoid carcinoma of head and neck: a twenty years experience, Saudi Journal of Otorhinolaryngology Head and Neck Surgery 2007 Vol 9, No. 1
2. Said MS, Shwartz MR, True malignant mixed tumour (carcinosarcoma), Medscape Reference, 2009
3. Stafferi C, Marioni G, Ferraro SM, Marino F, Staffieri A, Carcinoma de novo of the parotid gland, University of Padova, Article In Press 2006
4. Barnes L, Eveson JW, Reichart P, Sidransky D, Pathology and genetics of head and neck tumours, International Agency for Research on Cancer (IARC) Press Lyon 2005:77
5. Berthelet E, Shenouda G, Black MJ et. Al, Sarcomatoid carcinoma of the head and neck, Am J Surg 1994 168: 455-458