รายงานผู้ป่วย

Malignant fibrous histiocytoma in the nasal cavity and paranasal sinuses

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Abstract

Malignant fibrous histiocytoma of the nasal cavity is a rare malignant sarcoma of the soft tissue or bone, and it has not been reported in Thailand. The author hereby reports a case of malignant fibrous histiocytoma in the nasal cavity and paranasal sinuses. The patient presented with left nasal mass and a history of 7-year previous intranasal surgery. Punch biopsies were performed for histopathological diagnosis. Since the mass was huge, extensive and unresectable, the patient was conservatively and supportively treated by external beam radiotherapy with chemotherapy. The tumor did not respond and extened to cribiform plate and invaded the paranasal sinuses, nasal skin and extended through the anterior nares. The early detection of the tumor and appropriate surgical resection including radiotherapy is the most important for control this tumor.

Key words : Nasal mass, Malignant fibrous histiocytoma

Malignant fibrous histiocytoma is a rare tumor of the soft tissue or bone, especially if located in the head and neck.[1,2] These tumors usually manifest initially with symptoms directly referable to the involved sinus. If there is any evidence of metastatic disease, the prognosis appears to be poor.[3] The clinical features of malignant fibrous histocytoma of the nose and sinus were studied. The main symptoms were pain in the facial region, swelling of the check and nasal bleeding.[4] The radiation-induced malignant fibrous histiocytoma[5-7] and Chromium-induced malignant fibrous histiocytoma[8] has been reported. The author described here in a case of malignant fibrous histiocytoma at left nasal cavity which supposed to be the first reported case in Thailand.

Case report

A 65 year-old Thai male presented at the out-patient department of Thammasat University Hospital with six-month history of left nasal mass and a moderated degree of left nasal obstruction.

Seven years previously, he underwent left intranasal surgery of unknown type. He also complained with chronic pansinusitis for 3 years was treated with antibiotics off and on. Physical examination revealed left intranasal mass diameter about 8 cm., soft to firm consistency with contact

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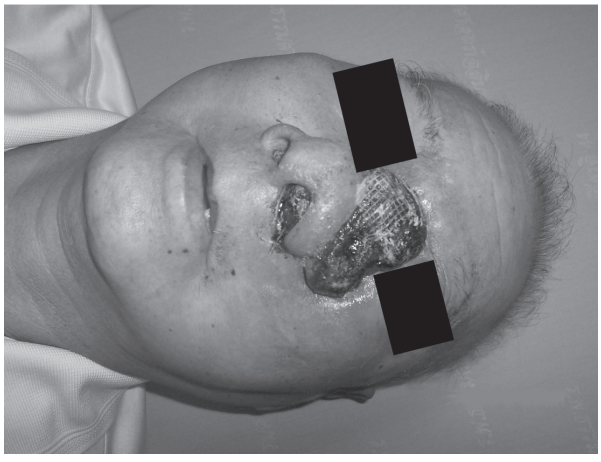

Figure 1 The patient with left nasal mass

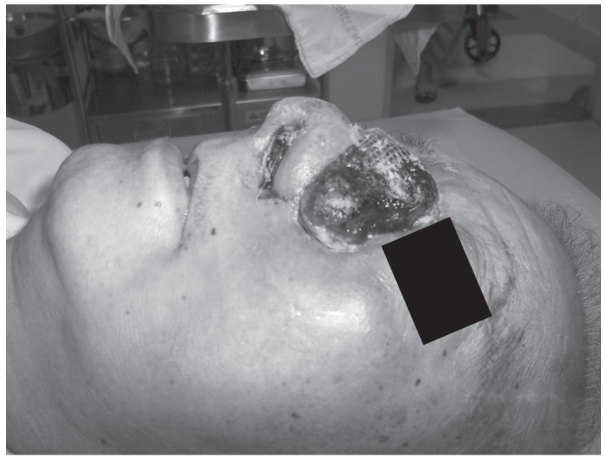

Figure 2 Lateral aspect of left nasal mass

bleeding and extended through the anterior nares (Figure 1, 2) and right nasal cavity was narrowing, no cervical lymphadenopathy. Otoscopic examination showed normal tympanic membranes. There were no cranial nerve deficits.

Punch biopsies of left nasal mass were performed. Histopathology was consistent with malignant fibrous histiocytoma. Metastatic work ups included chest x-ray and liver function tests which resulted in negative finding but film CT scan of head and neck was lost by the patient. The patient was treated by external beam radiotherapy with chemotherapy because of huge, extensive and unresectable tumor.

Four months after treatment, the left nasal mass did not respond and the tumor progressively extended to the cribiform plate, left ethmoid and maxillary sinuses and also protruded through the anterior nares and only supportive treatment finally in this case.

Discussion

Tumors of the nose and paranasal sinus are uncommon, and most head and neck surgeons will diagnose only a handful of such cases throughout their career. Malignant tumors of the sinonasal tract account for 0.2-0.8 percent of all human malignancies and only 3 percent of malignant tumors of the upper aerodigestive tract.[9] Most patients with tumors of the nose and paranasal sinuses are diagnosed relatively late in the course of their illness, as the early symptoms of paranasal sinus tumors mimic those of chronic sinusitis and it is difficult to adequately examine the paranasal sinuses. The head and neck surgeon should be aggressive in biopsying nasal and sinus lesions that are in any way suspicious and that do not respond to the usual antibiotic and decongestant regimens.[9]

The nasal cavity is divided into two sections by the cartilaginous and bony nasal septum. The septum is relatively resistant to tumor invasion. The nasal septum is frequently seen displaced into the contralateral nasal cavity by the tumor, especially in benign neoplastic processes. The lateral wall of the nasal cavities are perforated by the numerous ostia of the paranasal sinuses and the nasolacrimal duct. The turbinates project from the lateral nasal wall and are more frequently the primary site of tumor development than is the septum.

The cribiform plate composes the roof of the nasal cavity. Tumors involving the ethmoidal sinuses usually extend into the anterior cranial fossa through this relatively thin structure. The histologic classification and distribution tumor of the nose and paranasal sinuses are shown in (Table 1).

Table 1 Tumors of the nose, and paranasal sinuses

Malignant tumors
- Squmaous cell carcinoma
- Lymphoreticular tumors
  - Extranodal lymphoma
  - Extramedullary plasmacytoma
- Esthesioneuroblastoma
- Salivary gland tumors
  - Adenoid cystic carcinoma
  - Adenocarcinoma
  - Mucoepidermoid carcinoma
  - Other tumors
- Melanoma
- Sarcomas
  - Chondrosarcoma
  - Rhabdomyosarcoma
  - Fibrosarcoma
  - Angiosarcoma
  - Hemangiopericytoma
- Metastatic tumors
- Kaposi's sarcoma

Benign tumors
- Papilloma
- Inverted papilloma
- Meningioma
- Neuroma
- Hemangioma
- Chordoma
- Juvenile nasopharyngeal angiofibroma
- Osseous tumors
  - Osteoma
  - Ameloblastoma
  - Fibrous dysplasia
  - Cherubism

Malignant fibrous histiocytomas, or MFH, have been individualized only since the last four decades and these sarcomas which usually develop from soft tissues are no longer considered rare, except in some of their facial sinus localizations.[10] The paramount significance of anatomopathological investigations owing to the difficulty in establishing the diagnosis, since MFHs may be mistaken for benign process. In this case the late diagnosis is due to the mistakes in rhinosinusitis symptoms until it invades. This patient represents a left nasal mass with post-chemotherapy and radiotherapy but non-response for treatment because of mark extended mass for resection, the early detection of the tumor and appropriate surgical resection including radiotherapy is the most important for control this tumor.

However this case was a rare clinical representation but malignant fibrous histiocytomas should be included in the differential diagnosis of a nasal mass.

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บทคัดย่อ

โรค Malignant fibrous histiocytoma ในโพรงจมูกและไซนัส

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Malignant fibrous histiocytoma ของโพรงจมูก เป็นเนื้องอกมะเร็งในกลุ่มของ sarcoma ซึ่งพบได้น้อยมากและยังไม่พบรายงานเนื้องอกมะเร็งชนิดนี้ในโพรงจมูกในประเทศไทย ผู้ป่วยที่รายงานรายนี้ มาพบแพทย์ด้วย ก้อนในโพรงจมูก และเคยมีประวัติการผ่าตัดรักษาโรคภายในโพรงจมูก เมื่อ ๗ ปีก่อน ซึ่งไม่สามารถสืบค้นประวัติ การวินิจฉัย และการรักษาโรคในครั้งนั้นได้ ก่อนที่จะพบเนื้องอกชนิดนี้ในภายหลัง ส่วนการวินิจฉัยได้จากการตัดชิ้นเนื้อ และส่งตรวจทางพยาธิวิทยา, เนื่องจากก้อนเนื้องอกมีขนาดใหญ่และลุกลามไปมาก การรักษาจึงใช้รังสีรักษาร่วมกับเคมีบำบัดแต่ผลการรักษาโรคไม่สามารถควบคุมโรคได้ ยังพบมีการกระจายตัวของเนื้องอกเข้าสู่ cribiform plate ไซนัส และยื่นออกมาทางบริเวณจมูกส่วนหน้า สำหรับการรักษาในผู้ป่วยโรคเนื้องอก Malignant fibrous histiocytoma ในโพรงจมูกนั้น จำเป็นต้องรักษาด้วยการผ่าตัดเอาก้อนเนื้องอกออกทั้งหมด ร่วมกับการใช้รังสีรักษาและเคมีบำบัด และควรตรวจวินิจฉัยเนื้องอกมะเร็งตั้งแต่ในระยะเริ่มต้นของโรค จึงจะได้ผลการรักษาที่ดีกว่าผู้ป่วยรายนี้

คำสำคัญ : เนื้องอก, มะเร็ง, โพรงจมูก, ไซนัส