How to Cite:

A study about the nasal obstruction present in cases of malignancy in ent.

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Abstract---Tumours in the nasal cavity and paranasal sinuses were recognized during the time of Hippocrates. Whillis (1948) defined tumours as “an abnormal mass of tissue, the growth of which exceeds and is coordinated with that of the normal tissues and persists in the same excessive manner after cessation of the stimuli which evoked the Change. From the table I it is evident that only 5 cases of malignant and 3 cases of fungal granuloma, there was bony erosion. In 19 cases of antrochonal polyp and antrum and ethmoid sinus is found to be hazy. From the table I, on radiological study, sinuses are found to be hazy in 86.4% cases of antro choanal polyp and 89.4% cases of ethmoidal polyp. This finding is in accordance with that of miles (1971) who started that usually there is some degree of opacity of sinuses either due to thickening of mucosa or superadded infection. Erosion of bone is found in 70% cases of malignancy and the 3 case of fungal granuloma.

Keywords---Tumours, Paranasal Sinuses, Fungal Granuloma, Ethmoidal

Introduction

Tumours in the nasal cavity and paranasal sinuses were recognized during the time of Hippocrates.[1] Whillis (1948) defined tumours as “an abnormal mass of
tissue,[2] the growth of witch exceeds and is coordinated with that of the normal tissues and persists in the same excessive manner after cessation of the stimuli which evoked the Change”[3] Because of the close relation of the nose and paranasal sinuses to various important structures e.g. upper aero-digestive tract, orbit and skull base as well as cranial cavity,[4] malignant diseases of the nose and paranasal sinuses easily spread to these structures with devastating results, even before distant metastasis occurs.[5] Their initial presentation may not be different from that of other common benign diseases.[6] It has been recognized since long that malignant diseases of nose and paranasal sinuses can remain asymptomatic for quite a long period of time before giving rise to symptoms like any other malignant tumors.[7] In one series the average duration between the initial symptoms and confirmation of diagnosis was 6 months.[8]

**Method**

**Material Methods**

The present work comprises of clinical and histopathological assessment of mass in nose, amongst patients attending the Ear, Nose, and Throat out-door department of the V.S.S. Medical College Hospital, Burla during the period December 2009 to August 2011. Patients with a definite mass in nose are admitted to the E.N.T. ward for a thorough clinical study which includes detailed history, routine and special investigations and histopathological assessment of the lesion.

These cases are investigated under the following proforma.

1. Name, Age, Sex
2. Address
3. Religion
4. Registration Number
5. Occupation
6. Social Status
7. Chief complaints duration

   a. Persistent progressive nasal congestion and stuffiness.
   b. One side or both side nasal blockage.
   c. Nasal drainage in the back of the nose and throat.
   d. Nose Bleeds.
   e. Pus draining from the nose.
   f. Decreased sense of smell.
   g. Numbness or pain in part of the face.
   h. Loosening or numbness of the teeth.
   i. Growth or mass in the face, nose or palate.
   j. Persistent tearing of the eyes.
   k. Building of one of the eyes and/or visual loss.
   l. Pain or pressure in one of the ears.
   m. Difficulty opening the mouth.
   n. Lymph node enlargement in the neck areas.
8. History of present illness.
10. Family history.
11. Personal history
12. Table – I
13. Symptoms of Neoplastic nasal mass

Observation & Results

From Table No - I Nasal obstruction is present in all the cases of malignancy. Hemberger et al (1967) observed nasal obstruction in 36.4% of case of the total 648 cases. In the present observation only 8 cases are studied which may be statistically insignificant.

Wilson (1962), Taneja and Kohli (1967) and McGarvey et al (1969) had found nasal obstruction to be the common presenting symptom in nasopharyngeal angiofibroma. In this series all the 3 cases of nasopharyngeal angiofibroma had bilateral nasal obstruction

Table No - I
Nasal obstruction is present in all the cases of malignancy

<table>
<thead>
<tr>
<th>Si.No.</th>
<th>Type of mass</th>
<th>Normal</th>
<th>Hazy</th>
<th>Erosion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Non- neoplastic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Rhinosporidiosis</td>
<td>37(82%)</td>
<td>8(18%)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Antrochonanal polyp</td>
<td>3(13.6%)</td>
<td>19(86.4%)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ethmoidal Polyp</td>
<td>1(10.6%)</td>
<td>16(89.4%)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cyst</td>
<td>5(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fungal granuloma</td>
<td></td>
<td>4(100%)</td>
<td>3(75%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Bening Tumours</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Tumour Type</th>
<th>No. of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Hemangioma</td>
<td>9(90%)</td>
<td>1(10%)</td>
</tr>
<tr>
<td>7</td>
<td>Squamous cell papilloma</td>
<td>6(100%)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Fibroma</td>
<td>3(100%)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Angiofibroma</td>
<td>2(66%)</td>
<td>1(33%)</td>
</tr>
<tr>
<td>10</td>
<td>Inverted Papilloma</td>
<td>1(33%)</td>
<td>2(66%)</td>
</tr>
<tr>
<td>11</td>
<td>Neurofibroma</td>
<td>1(100)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Ossifying Fibroma of maxilla</td>
<td></td>
<td>1(100%)</td>
</tr>
<tr>
<td>13</td>
<td>Pleomorphic adenoma</td>
<td></td>
<td>1(100%)</td>
</tr>
</tbody>
</table>

**Malignant Tumours**

<table>
<thead>
<tr>
<th>No.</th>
<th>Tumour Type</th>
<th>No. of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Sq.cell CA Maxilla</td>
<td></td>
<td>3(100%)</td>
</tr>
<tr>
<td>15</td>
<td>Sq.cell CA Nose</td>
<td></td>
<td>1(50%)</td>
</tr>
<tr>
<td>16</td>
<td>Sq.cell CA Ethmoid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Adenoid cystic CA maxilla</td>
<td></td>
<td>1(100%)</td>
</tr>
<tr>
<td>18</td>
<td>Adenocarcinoma maxillary sinus</td>
<td></td>
<td>1(100%)</td>
</tr>
</tbody>
</table>
Fig: 2& 3 Axial CT scan and MR imaging of a case of inverted papilloma showing 2 focal area of hyperostosis on posterior wall of left maxillary sinus which was later confirmed to be the site of tumor origin during surgery. CT Scan showing sinonasal fungal mass

**Conclusion**

From the table I it is evident that only 5 cases of malignant and 3 cases of fungal Granuloma, there was bony erosion. In 19 cases of antro chonal polyp and antrum
and ethmoid sinus is found to be hazy. From the table I, on radiological study, sinuses are found to be hazy in 86.4% cases of antro choanal polyp and 89.4% cases of ethmoidal polyp. This finding is in accordance with that of miles (1971) who started that usually there is some degree of opacity of sinuses either due to thickening of mucosa or superadded infection. erosion of bone is found in 70% cases of malignancy and the 3 case of fungal granuloma.

References