



## **SWELLINGS AT THE ANGLE OF THE MANDIBLE: A DIAGNOSTIC GUIDE**

**Deepak Tomar<sup>1</sup>, Jitender Solanki<sup>2</sup>, Sarika Gupta<sup>3</sup> and Khushboo Kachwaha<sup>3</sup>**

<sup>1</sup>Department of Orthodontics, Vyas Dental College and Hospital.

<sup>2</sup>Department of Public Health Dentistry, Vyas Dental College and Hospital.

<sup>3</sup>Department of Oral Medicine and Radiology, Vyas Dental College and Hospital.

### **Article Info**

*Received 23/07/2015*

*Revised 16/08/2015*

*Accepted 19/09/2015*

**Key words:-** Swelling, Mandible, Classification, Extraoral.

### **ABSTRACT**

Diagnosis of many clinically similar lesions that are present on a particular site can be challenging. For clinical purpose the swellings occurring in the orofacial region can be developmental, traumatic, inflammatory, neoplastic or miscellaneous. This article lists all the possible causes of swellings at the angle of mandible.

### **INTRODUCTION**

The term swelling is a vague description an enlargement or protuberance in the body [1]. Swellings can be discovered during routine examination or the patient may be aware of it when the swelling is symptomatic. It is of paramount importance that the clinician precisely formulates a brief differential diagnosis when a swelling is detected. For a competent diagnosis the clinician must be aware of the disease incidence, signs and symptoms and the associated etiology [2].

A swelling can be present anywhere on the body, including the intraoral and extraoral sites. These swellings may be classified briefly based upon the etiology and tissue of origin. Since swellings at the angle of mandible may look clinically similar, they can be both benign and malignant. This article lists all the possible causes of swellings at the angle of mandible.

#### **Classification [3-8]**

##### **I. Based on the etiology**

##### **Developmental**

- Cherubism

Corresponding Author

**Jitender Solanki**

Email: - [solankijitender@gmail.com](mailto:solankijitender@gmail.com)

##### **Traumatic/inflammatory/infectious**

- Fracture at the angle of the mandible and symphysis area.
- Periapical / Pericoronitis
- Osteomyelitis
- Cellulitis
- Submasseteric space infection
- Submandibular space infection
- Sialadenitis
- Ludwig's angina
- Actinomycosis
- Tuberculosis
- Sarcoidosis

##### **Cystic**

- Dentigerous cyst
- Buccal bifurcation cyst
- Odontogenic keratocyst
- Simple bone cyst
- Dermoid cyst

##### **Neoplastic Benign**

- Ameloblastoma
- Calcifying epithelial odontogenic tumor



- Ameloblastic fibroma
- Ameloblastic fibrodontoma
- Odontogenic myxoma
- Odontogenic fibroma
- Neurilemmoma
- Osteoma
- Hemangioma
- Arteriovenous fistula
- Osteoblastoma
- Osteoid osteoma
- Desmoplastic fibroma of bone
- Pleomorphic adenoma
- Warthin's tumor
- Oncocytoma
- Basal cell adenoma
- Myoepitheliomas

#### **Malignant Carcinoma**

- Squamous cell carcinoma
- Malignant ameloblastoma and ameloblastic carcinoma
- Central mucoepidermoid carcinoma
- Adenoid cystic carcinoma
- Acinic cell carcinoma
- Carcinoma ex pleomorphic adenoma
- Adenocarcinoma
- Myoepithelial carcinoma

#### **Sarcomas**

- Osteosarcoma
- Ewing's sarcoma
- Fibrosarcoma

#### **Malignancies of hematopoietic system**

- Non Hodgkin's lymphoma
- Burkitt's lymphoma

#### **Metastatic malignancy**

##### **Miscellaneous**

- Sialadenosis

#### **II. Based on the tissue of origin Odontogenic**

- Periapical/Pericoronitis
- Osteomyelitis
- Cellulitis
- Submasseteric space infection
- Submandibular space infection
- Ludwig's angina
- Dentigerous cyst
- Buccal bifurcation cyst
- Odontogenic keratocyst

#### **Odontogenic epithelial tumors**

- Ameloblastoma

- Malignant ameloblastoma and ameloblastic carcinoma
- Calcifying epithelial odontogenic tumor

#### **Mixed tumors of odontogenic epithelium and ectomesenchyme**

- Ameloblastic fibroma
- Ameloblastic fibrodontoma

#### **Mesenchymal tumors**

- Odontogenic myxoma
- Odontogenic fibroma

#### **Non odontogenic**

##### **Cystic lesions**

- Simple bone cyst
- Dermoid cyst

#### **Salivary gland lesions**

- Sialadenosis
- Sialadenitis
- Pleomorphic adenoma
- Warthin's tumor
- Oncocytoma
- Basal cell adenoma
- Myoepitheliomas
- Mucoepidermoid carcinoma
- Adenoid cystic carcinoma
- Acinic cell carcinoma
- Carcinoma ex pleomorphic adenoma
- Adenocarcinoma
- Myoepithelial carcinoma

#### **Tumors of neural origin**

1. Neurilemmoma

#### **Mesodermal tumors**

2. Osteoma
  3. Hemangioma
  4. Arteriovenous fistula
  5. Osteoblastoma
  6. Osteoid osteoma
- Desmoplastic fibroma of bone

#### **CONCLUSION**

A thorough knowledge of all the etiologies that lead to a swelling in this region is desirable by the clinician. Based upon this, the disease pattern can be expanded thereby supporting the disease validity. Developing of a near acute provisional diagnosis helps to timely identify and treat the disease.

**ACKNOWLEDGEMENT:** None

#### **CONFLICT OF INTEREST:**

The authors declare that they have no conflict of interest.



## **REFERENCES**

1. Ongole R, BN Praveen. (2007). Clinical Manual for Oral Medicine and Radiology. 1<sup>st</sup> edition, Jaypee Brothers Medical Publishers (P) Ltd, 129-37.
2. Wood NK, Goaz PW. (1998). Diagnostico diferencial de las lesiones orales y maxilofaciales. Madrid, Harcourt Brace de Espana SA, 39-46.
3. Neville BW, Damn DD. (2002). Oral & Maxillofacial Pathology. 2<sup>nd</sup> edition, Elsevier, 798-803.
4. Greenberg MS, Glick M, editors. (2003). Burket's Oral Medicine, diagnosis and treatment. 10<sup>th</sup> Edition. Ontario, BC Decker Inc. Elsevier, 129-152, 191-222.
5. White SC, Pharaoh MJ. (2009). Oral Radiology Principles and Interpretation. 6<sup>th</sup> edition, Elsevier, 366-426.
6. Shafer, Hine and Levy. (2008). Oral pathology, 5<sup>th</sup> Edition Elsevier Lagpat nagar New Delhi, Chapter 2,4,5,17.
7. Cawson RA, Odell EW. (2008). Cawson's Essentials of Oral Pathology and Oral Medicine. 8<sup>th</sup> edition, Elsevier, 291-307, 321-26.
8. Coleman GC, Nelson JF. (1993). Principles of Oral Diagnosis. Mosby Year Book, Inc, 352-87.

