

Peripheral Osteoma Of The Mandible-A Case Report

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Abstract: Osteomas Are Benign Osteogenic Tumour Characterised By Proliferation Of Compact Or Cancellous Bone. The Three Varieties Of Osteoma Are Central Variant Arising From Endosteum, The Peripheral Variant Arising From Periosteum And The Extra Skeletal Soft Tissue Osteomas Arising Within A Muscle. Osteoma Arising In Facial Bone Is A Rare Entity. Peripheral Osteoma Has Been Known To Occur In Frontal, Ethmoid And Maxillary Sinuses But Not Common In Jaw Bones. We Describe Here A Case Report Of Peripheral Osteoma Of Mandible In A Middle-Aged Female Patient.

Key Words:Osteoma, Benign, Mandible

1. INTRODUCTION:

Osteomas Are Benign Non-Odontogenic Tumour Of The Jaw. Osteomas May Be Classified As Peripheral, Central Or Extraskelatal. A Peripheral Osteoma Arises From The Periosteum, A Central Osteoma Arises From Endosteum And An Extraskelatal Osteoma Arises In The Soft Tissue. Osteomas Can Form Within The Bone As A Well-Circumscribed Radiopacity Or On The Surface Of Bone As Either A Sessile Or Polypoid Bony-Hard Mass.^[1] Osteomas Are Essentially Restricted To The Craniofacial Skeleton And Rarely, If Ever, Are Diagnosed In Other Bones.^[2] A Peripheral Osteoma Arises Most Frequently In The Paranasal Sinuses. Other Locations Include The Orbital Wall, Temporal Bone, Pterygoid Processes, External Ear Canal, And Mandible. The Involvement Of Mandible Is More Common Than Maxilla When It Comes To Jaw Bones. In The Mandible, Dense Peripheral Osteoma Is Most Commonly Found And The Cancellous Osteoma Is Relatively Rare.^[3] There Is Equal Predilection For Both Genders Occurring Most Commonly In Young Adults. Osteomas Are Asymptomatic And Usually Detected On Routine Radiographic Evaluation Or Due To The Facial Asymmetry Which Is Due To Slowly Progressive Enlargement Of The Affected Area.

Here We Report A Rare Case Of A Solitary Peripheral Osteoma Arising In The Ramus Of The Mandible In A Middle-Aged Female.

Case Report:

A 37-Year-Old Female Patient Reported To Department Of Oral Medicine And Radiology With A Chief Complaint Of Slowly Enlarging Swelling On The Left Side Of The Face That

Had Persisted For About 8 Months. It Has Remained The Same Size Since Approximately 1-2 Years. Her Dental And Medical History Was Not Contributory. On Extra Oral Examination, Bony Hard Non Tender Swelling Of Size, 3cm X 2.5 Cm Was Seen Extending Anteriorly 4 Cm From The Malar Prominence, Posteriorly In Front Of The Tragus, Superiorly 2cm From Condyle And Inferiorly 5cm From Angle Of The Mandible [Figure 1]. On Intraoral Examination, No Significant Finding With Respect To Swelling Was Noted. On Radiographic Examination, Orthopantomograph Revealed A Well-Defined Radiopaque Mass In The Region Of Left Ramus Of The Mandible Measuring Approximately 3cm * 2.5cm In Dimensions. [Figure 2]. Ct Scan Revealed A Well-Defined Radiodense Area Attached By Means Of Stalk To The Left Ascending Part Of The Ramus [Figure 3].

On The Basis Of Clinical And Radiological Examination, A Provisional Diagnosis Of Osteoma Of The Left Ramus Of The Mandible Was Given. Excision Was Performed Under General Anaesthesia Under Aseptic Conditions. The Haematoxylin And Eosin Stain Histopathological Section Were Composed Of Dense Compact Bone With Small And Randomly Distributed Osteocytes And Haversian Canals (Figure 4) Which Were Compatible With The Clinical Diagnosis Of Osteoma.



Figure 1: Extraoral Picture Showing Bony Hard Swelling In Front Of The Tragus



Figure 2:Pre-Operative Opg Showing Well-Defined Radiopaque Mass Is Seen In The Region Of Left Ramus Of The Mandible

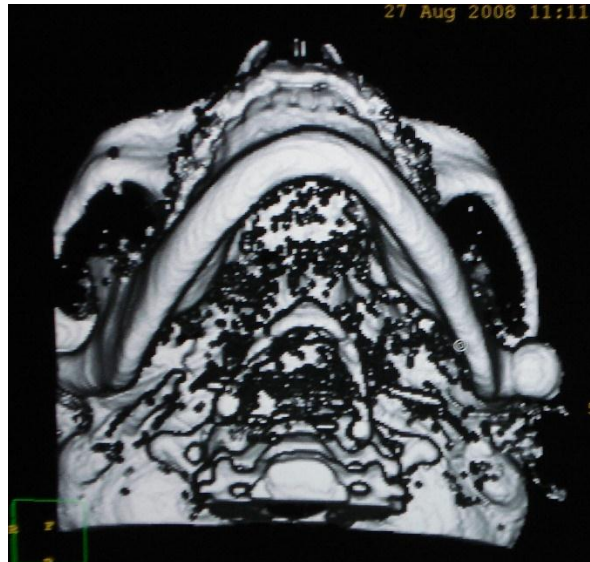


Figure 3: 3d Ct Image Showing Well-Defined Radio Dense Area Attached By Means Of Stalk To The Left Ascending Part Of The Ramus

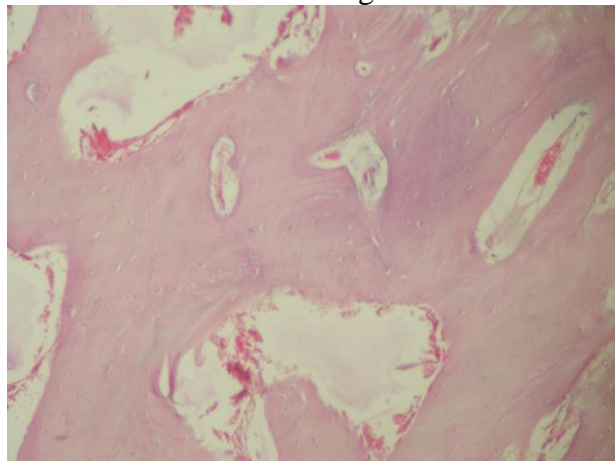


Figure 4: Histopathology Picture Showing Dense Compact Bone With Small And Randomly Distributed Osteocytes And Haversian Canals

2. DISCUSSION:

Osteomas Of The Jaws Are Rare Osteogenic Lesions. Peripheral Osteomas Typically Present As Mushroom Shaped Hard Radiopaque Masses Which Are Often Pedunculated But May Also Have A Broad Base By Which They Are Attached To The Cortical Plates. Their Growth Potential Is Usually Limited, However They Will Continue To Slowly Grow If Left Untreated.^[4] Osteomas Are More Common In The Young Adult. ^[5] These Lesions Are More Frequent In The Mandible Than The Maxilla. In This Case, The Age And Site Of The Lesion Are In Agreement With The Existing Literature.

Maxillofacial Osteomas Arise The Possibility Of Gardner Syndrome But The Patients With Gardner Syndrome Usually Present With Accompanying Diarrhoea, Pain In Abdomen, Rectal Bleeding, Colorectal Polyposis, Multiple Osteomas, Tumours Of Both Skin And Soft

Tissues, And Multiple Impacted Supernumerary Teeth.^[3] The Lesion In Our Case Is An Isolated One And Hence Gardner Syndrome Is Not Considered.

Radiographically, Osteomas Have A Well-Defined Border And Those Composed Solely Of Compact Bone Appearing Uniformly Radiopaque; Those Containing Cancellous Bone Show Evidence Of Internal Trabecular Structure. The Mandibular Lesion May Be Exophytic, Sessile Or Pedunculated, Extending Outward Into Adjacent Soft Tissues.^[6] In Our Case It Is An Exophytic Pedunculated Uniformly Radiopaque Mass Extending From The Ascending Part Of Mandibular Ramus. Histologically, The Osteoma Is Composed Either Of Extremely Dense, Compact Bone Or Of Coarse Cancellous Bone. In Any Given Area The Bone Formed Appears Normal.^[5] In Our Case It Is Composed Of Dense Compact Bone With Small And Randomly Distributed Osteocytes And Haversian Canals Confirming The Diagnosis Of Osteoma.

Management Of Osteomas Is Usually Indicated Only For Larger Lesions. Small Asymptomatic Lesions Have To Be Kept Under Clinical And Radiological Follow Up And Larger, Deforming And Progressive Osteomas Causing Facial Asymmetry Have To Be Surgically Excised. Recurrence After Resection Is Very Rare, And Malignant Transformation Has Not Been Reported In The Literature.

Patient Perspective:

There Were No Adverse Effects And It Was Aesthetically Pleasing That Improved The Quality Of The Life From The Patients' Perspective.

Informed Consent:

As The Authors Of This Case Report, We Certify That All Appropriate Patient Consent Forms Were Obtained. In The Way, The Patient (S) Has/Have Given His/Her/Their Consent For His/Her/Their Images And Other Clinical Information To Be Reported In The Journal. The Patients Understand That Their Names And Initials Will Not Be Published, And Due Efforts Will Be Made To Conceal Their Identity, But Anonymity Cannot Be Guaranteed.

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Nil.

Conflicts Of Interest:

There Are No Conflicts Of Interest.

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