

原文題目(出處)：	An endocrine jaw lesion: Dentist perspective in diagnosis. Case Rep Dent Volume 2016, Article ID 2582038
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內文：

Introduction:

1. Types of Hyperparathyroidism (HPT):

- (1) Primary: parathyroid adenomas, hyperplasias, carcinomas
- (2) Secondary: compensatory parathormone level increase
- (3) Tertiary: autonomous functioning of parathyroid gland
- (4) Fourth: ectopic variant of other malignancies

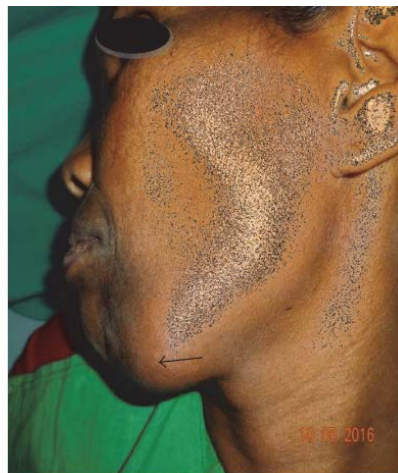
2. Many a times, hyperparathyroidism is discovered accidentally on routine biochemical and radiological investigations.

3. Brown tumor

- (1) Von Recklinghausen's disease of bone or osteitis cystica fibrosa
- (2) not a true neoplasm
- (3) hemorrhage, vascularization, and hemosiderin deposits
- (4) mostly asymptomatic
- (5) unilocular or multilocular lesion with an irregular periphery
- (6) multinucleated giant cells within a fibrovascular stroma

Case Report:

1. A 40-year-old female with a chief complaint of pain in the lower left back tooth region since 6 months and associated swelling since 3 months.
2. PMH: weight loss(1 year), traumatic incident(3 months ago), hypertensive(3 months)

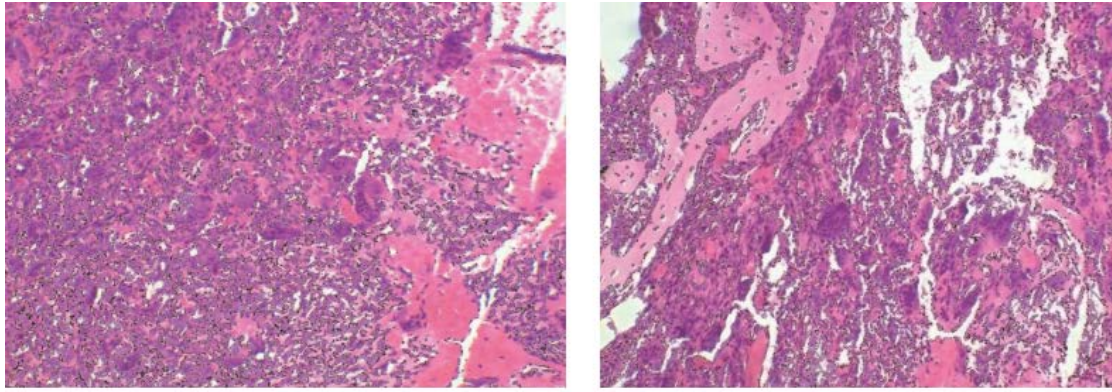




3. Extraoral exam.: swelling on the left lower third of the face
4. Intraoral exam.: swelling of 1 × 3 cm extending from distal aspect of 34 to mesial aspect of 37 with no sulcus obliteration and associated tooth mobility.
5. Palpation: hard and tender
6. Pano:
 - (1) multilocular radiolucent lesion with well-defined margins in relation to 35 and 36
 - (2) thinning out of inferior border of mandible
 - (3) 35 and 36 loss of lamina dura
 - (4) loss of continuity of mandibular canal



7. FNAC: a reddish colored aspirate, composed of RBCs, lymphocytes, and neutrophils.



8. Microscopic exam:
 - (1) osteoclast like multinucleated giant cells of varying sizes and shapes
 - (2) osteoid, trabecular bone, hemorrhage, and inflammatory component
9. Hematological exam:
 - (1) Increased level of serum calcium (13.1 mg%/ norm.: 8.8–11 mg%) and phosphorus levels(10 mg%/ norm.: 2.5–4.8 mg%)
 - (2) Increased levels of paratharmone (711.3 pg/mL; norm.: 12–72 pg/mL)
10. Ultrasound of neck: hypoechoic lesion of $2.2 \times 2 \times 3.1$ cm, located posteriorly and inferiorly to the right lobe of thyroid causing an indentation, suggestive of a parathyroid adenoma.



11. Skull radiograph
12. Final diagnosis: brown tumor associated with primary hyperparathyroidism

Discussion:

1. Primary hyperparathyroidism
 - (1) 3rd most common endocrine disease
 - (2) Sometimes hereditary: hyperparathyroidism-jaw tumor syndrome (HPT-JT syndrome) and multiple endocrine neoplasia (MEN) syndrome
2. HPT is commonly asymptomatic; however some undergo weight loss, GIT, and musculoskeletal disturbances.
3. Brown Tumor:
 - (1) 10% of all skeletal lesions, 0.1% incidence in jaws
 - (2) common in females older than 50 years(hormonal imbalances)
 - (3) commonly seen in ribs, clavicle, and pelvis
 - (4) mandible > maxilla, especially the posterior region

- (5) Symptoms depend on their size and location
 - (6) Radiographically: Well-defined radiolucent lesion with bone expansion and loss of lamina dura surrounding the roots of involved teeth.
 - (7) Additional features: subperiosteal resorption of phalanges of index and middle fingers, generalized osteopenia, and focal areas of skull demineralization-salt and pepper appearance.
 - (8) Histopathologically: dense fibroblastic stroma, cystic degeneration, osteoid, hemorrhage, macrophages with hemosiderin, and multinucleated osteoclastic giant cells
 - (9) Ultra-sound, CT exam, technetium scan
4. Treatment and prognosis of HPT
- (1) parathyroid excision
 - (2) tumor excision
 - (3) rare recurrence
 - (4) Prognosis of the lesion mainly depends on the evaluation of biochemical parameters after extirpation of parathyroid tumor.

Conclusion

1. All giant cell lesions occurring in the jaws have to be further evaluated biochemically to rule out primary hyperparathyroidism.

題號	題目
1	<p>有一個快樂的 63 歲女性，工作是養雞，主訴是三個月前右邊下頷角處開始腫起，無痛。X 光下可見該區域有 radiolucency；切片後顯微鏡可見很多多核的巨細胞(multinucleated giant cells)及血鐵黃素(hemosiderin)、類骨質(osteoid)的沉積。經過抽血檢測，血液中的副甲狀腺素及鈣、磷的濃度不尋常地高。請問此病患最可能罹患何疾病？</p> <p>(A) Giant cell tumor(osteoclastoma) (B) Central giant cell granuloma (C) Aneurysmal bone cyst (D) Brown tumor</p>
答案(D)	出處：Oral and Maxillofacial Pathology
題號	題目
2	<p>關於初級副甲狀腺素亢進症(primary HTP)的患者，以下何者錯誤？</p> <p>(A) 常為 60 歲以上的女性 (B) 偶見體重過輕、眼球突出的症狀 (C) 約 85% 為 parathyroid adenoma 引起 (D) 常抱怨有 "stones, bones, and (abdominal) groans</p>
答案(B)	出處：Oral and Maxillofacial Pathology