

原文題目(出處)：	Radiographic Diagnosis of Synovial Chondromatosis of the Temporomandibular Joint: A Case Report
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內文：

#### 前言

1. Synovial chondromatosis is a rare, benign condition that usually affects the larger joints of the axial skeleton typically the knee (35%), elbow (22%), wrist (11%) and hip (4%).
2. The temporomandibular joint (TMJ) is infrequently affected, with approximately 120 cases reported in the literature
3. In the TMJ, synovial chondromatosis involves only the superior joint space
4. Females are affected more frequently than males. The average age of those affected is 44.4 years (range: 21–66 years)
5. People with this condition may present with swelling, pain, intracapsular sounds and limitation of mandibular movement
6. Synovial chondromatosis is characterized by the formation of fragments of cartilage
  - a. primary form: fibroblasts beneath the synovial membrane undergo metaplasia and deposit chondromucin
  - b. secondary form: occurs subsequent to pre-existing joint disease, such as arthritis or traumatism, and involves synovial nourishment of dislodged fragments of soft tissue
7. Accurate diagnosis of synovial chondromatosis is based on history and clinical, radiographic and microscopic examination.
8. CT、VCT、and MRI are great tools for synovial chondromatosis diagnosis

#### Case report

##### General data:

An 82-year-old man

##### Chief complaint:

a swelling on the left side of his pre-auricular area

##### Present illness:

This 82-year-old man presented to the University of Detroit Mercy School of Dentistry clinic with a swelling on the left side of his face that had developed over the past 5 years. Discomfort, which occurred before the swelling, was described as persistent, gnawing and worse at night. No history of limitation of mandibular movement or intracapsular sounds was associated with the swelling. For many decades after suffering painful repetitive jaw trauma while serving in the armed forces during World War II, the patient had experienced episodic tenderness in the left TMJ on prolonged mouth opening. Three years before presentation, he had visited his primary care physician for evaluation of the swelling, which had been clinically diagnosed as a benign tumor.

##### Medical history:

Managed hypertension and hypercholesterolemia

##### Past medical history:

1. adenoma of the thyroid gland

2. cerebrovascular accident (without neurologic deficit)

Past dental history:

1. periodontal maintenance
2. OD
3. maxillary and mandibular partial denture fabrication.

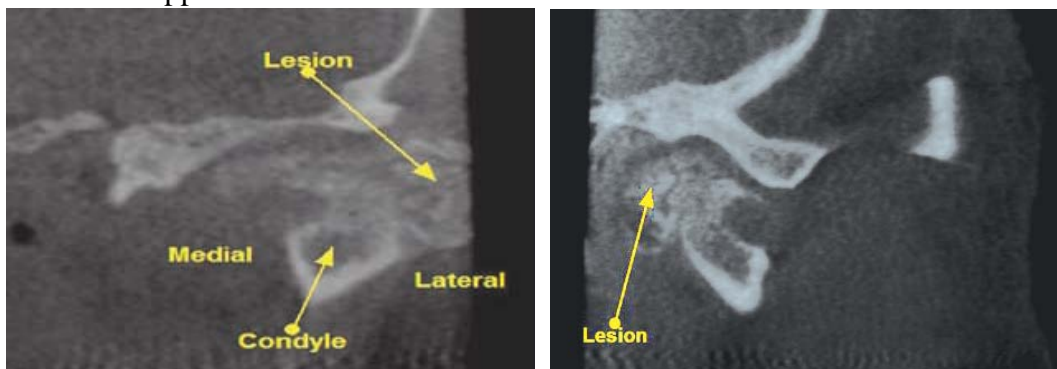
Clinical examination:

1. A well-circumscribed 50 mm × 40 mm extraoral swelling was present in the left preauricular region.
2. Palpation revealed a hard, non-tender mass
3. MMO=35mm
4. An asymptomatic click was identified on the left side of the TMJ on closing



X-ray finding:

1. A radiopacity adjacent to the left condyle
2. Cone beam VCT images revealing a well-defined radiopaque–radiolucent mass on the anteromedial aspect of the left condyle, extending to completely involve the posterior region of the condyle
2. Mild flattening of the condyle suggesting degenerative change, but the cortical outline appeared intact



#### DISCUSSION

1. The patient was a World War II veteran with a convincing history of repeated trauma to the jaws and the TMJ and symptoms of joint disease extending over many decades. The secondary form of synovial chondromatosis is particularly relevant in our case report
2. D.D

**Table 1** Differential diagnosis of synovial chondromatosis

Diagnosis	Distinguishing characteristics
Synovial chondromatosis	Loose bodies in synovial space; cortical outline of bone unaltered; calcifications can attain a large size
Osteoarthritis (joint mice)	Small calcifications
Chondrocalcinosis (pseudogout)	Fine calcifications; even distribution
Osteochondroma	Arises from condylar head; cartilage cap present
Pigmented villonodular synovitis	Not localized to a portion of the joint
Osteochondritis dissecans	Younger patients; associated with osteochondral fracture

a. Osteoarthritis: an age-related degenerative disease, common in women. Common radiographic findings include osteophyte formation, erosion, flattening, sclerosis of mandibular fossa. The calcifications (joint mice) are small. In our patient, the size of the calcifications and the apparently normal cortical outlines of the mandibular condyle and fossa did not favour a diagnosis of osteoarthritis

b. Chondrocalcinosis (pseudogout): arthritis caused by the precipitation of calcium pyrophosphate crystals (焦磷酸鈣鹽結晶). It is considered a disease of older patients. There were no predisposing factors evident in our patient, nor did he show any sign of a metabolic disease (gout).

c. Osteochondroma: a cartilage-capped bony growth usually affecting the appendicular skeleton and rarely involving the mandibular condyle. CT usually depicts the continuity between the cortical outline of native bone and the tumour, a feature that was absent in our patient

3. The appropriate treatment for synovial chondromatosis includes surgical removal of calcifications followed by total or subtotal synovectomy

**CONCLUSION**

The various radiographic modalities used to evaluate a case of synovial chondromatosis of the TMJ have been elucidated. General dentists must be aware of the availability of this new imaging technology and its ability to diagnose maxillofacial anomalies with radiation doses as low as reasonably achievable

題號	題目
1	有關Synovial chondromatosis，下列敘述何者錯誤？ (A) 女性較易發生 (B) 較常發生在比較大的關節 (C) 病患不會有任何臨床症狀 (D) 在治療上通常是做SYNOVECTOMY
答案(c)	出處：Oral & Maxillofacial Pathology p.572
題號	題目
2	下列哪一病很難與Synovial chondromatosis作鑑別診斷？ (A) Osteoarthritis (B) pseudogout (C) Osteochondroma (D) 以上皆是
答案(D)	出處：Oral & Maxillofacial Pathology P.572