# A Rare Reason of Persistant Finger Pain During Pregnancy and After: Osteochondroma

# Hamilelikte ve Sonrasında Geçmeyen Parmak Ağrısının Nadir Bir Nedeni: Osteokondrom

Cengiz Işık, Hüsamettin Çakıcı, Recai Özkılıç

Abant İzzet Baysal Üniversitesi Tıp Fakültesi, Ortopedi Ve Travmatoloji Ana Bilim Dalı, Bolu

#### **Abstract**

Osteochondroma is the most common benign bone tumor (% 20-50). Osteochondroma is rarely seen on hand. Edema in the body due to hormonal changes during pregnancy can be seen. Tenosynovitis and entrapment neuropathies are increasing the rate. In our case we report; 24 years old female patient's osteochondroma on the right-hand third finger was existing. There was no complaint of the patient for 4 years. Patient's complaints were started with pregnancy. The complaints were not finished with medical treatment until six month after pregnancy. Mass excision was suggested to the patient. The patient's complaint was finished after mass excision. No similar case was met in the literature.

Keywords: Hand, osteochondroma, pregnancy.

Osteokondrom en sık görülen benign kemik tümörüdür(%20-50). Elde nadir görülmektedir. Gebelik döneminde hormonal değişikliklere bağlı vücutta ödem görülebilmektedir. Tenosinovit ve tuzak nöropatilerin görülme oranı artmaktadır. Bizim sunduğumuz olgumuzda, 24 yaşında bayan hastanın sağ el 3. parmağında osteokondrom mevcuttu. Hastanın şikayeti yoktu. Gebelik ile şikayetleri başladı. Gebelik sonrası 6 ay medikal tedavi almasına rağmen şikayetleri geçmedi. Hastaya kitle eksizyonu önerildi. Kitle eksizyonu sonrasında hastanın şikayetleri geçti. Literatürde benzer olguya rastlanmamıştır.

Anahtar Kelimeler: El, osteokondrom, hamilelik.

## Introduction

Osteochondroma (exostosis) is the most frequently observed bone tumor (1,2). It accounts for 20-50% of all benign bone tumors and 10-15% of all bone tumors. Osteochondromas are found most often in distal femur and proximal tibia and humerus. Except hereditary multiple exostosis, it is rarely seen in hand. The total prevalence of osteochondromas in hand and foot is 10% (3). Unless osteochondroma compresses neighboring vessel and nerve structures and mechanically obstructs neighboring joint, patients rarely have complaints (4).

In our patient a diffuse edema developed with pregnancy and complaints of pain and movement limitation started at the localization of osteochondroma. When the literature was reviewed, there was no similar case in the literature.

## **Case Report**

The patient was 24 years old female. For 4 years, the patient had a firm mass in the 3rd finger of the right hand without any pain. In the 6th month of pregnancy, the patient started having limitation of movement and distal numbness in the finger due to the pain at the area of the mass. The patient did not respond to medical treatment. Medical treatment and

resting splint was used until 6 week after delivery. Examination revealed a firm mass of 5x3 cm involving proximal interphalangeal joint of the 3rd finger of the right hand and fixed to the proximal phalanx at ulnar side. Joint movement was painful due to presence of mass and findings of tenosynovitis were observed additionally. 2 dimensional X-ray radiography was taken (Figure 1).



Figure 1. The Osteochondroma in the 3rd finger in the right hand at AP radiograph. A mass was detected on the ventral surface of the ulnar side of the distal proximal phalanx of the 3rd finger in the right hand.

Çıkar Çatışması / Conflict of Interest: Yok / None

Geliş tarihi / Received: 24.07.2012

A magnetic resonance imaging was performed (Figure 2).



**Figure 2.** The image of osteochondroma on MRI.

It was detected that there was an osteochondroma having a size of 3x5mm at the ventral surface of the proximal phalanx of the 3rd finger in the right hand and that there was a diffuse inflammation in adjacent soft tissue. The patient neither had any mass in other extremities nor a family history. Total excision of the mass was suggested to the patient as conservative treatments did not have any effect on the complaints of the patient. Finger tourniquet was performed under local anesthesia. Starting with an incision at the upper part of the mass, the mass was removed entirely (Figure 3).

Upon pathological examination, diagnosis of osteochondroma was made definite. No complications developed during scar follow-ups. It was observed during further follow-up of the patient that the complaints decreased gradually and disappeared. There was no movement loss in proximal interphalangeal joint. No deformity occurred in the finger.



**Figure 3.** The intraoperative view of osteochondroma.

## **Discussion**

Osteochondroma is most frequently observed in ages 20 to 30. It is rarely seen in hands and foot (5,6). Generally, it is observed in proximal and middle phalanges, metacarpals and metatarsals (7). Most of the cases have hereditary multiple exostosis. Osteochondroma rarely shows clinical symptoms. With pregnancy, tenosynovitis and tunnel syndromes due to diffuse edema secondary to hormonal changes can be observed (8). In our patient, too, a diffuse edema developed with pregnancy and complaints of pain and movement limitation started at the localization of osteochondroma. The literature review we conducted revealed many osteochondroma cases without any symptoms at hand phalanges. However, we could not find any cases having symptoms due to diffuse body edema during pregnancy.

As a result, although osteochondromas occurring at ventral part of hand phalanges are rare, these, unlike those in other regions, generally do not show any symptoms. Complaints at the localization of osteochondroma may occur due to changes in body during pregnancy.

## **KAYNAKLAR**

- 1. Karakaş K, Perçin S, Kış M. Soliter osteokondromda pedikül kırığı. Acta Orthop Traumatol Turc 2000; 34: 96-7.
- 2. Mansour AMR, Radwan YA. Recurrent Osteochondroma of the phalanges of the Hand: Review of Literature and a Case Report.Pan Arab J. Orth. Trauma. 2007;11:114-117
- 3. Öztürk H, Öztemür Z, Ünsaldı T, Aslan TT. Soliter Osteokondrom Tanısı İle Opere Edilen 23 Olgunun Retrospektif Değerlendirilmesi C. Ü. Tıp Fakültesi Dergisi 2006;8: 61 64
- 4. Greenspan A, Jundt G, Remagen W. Differential Diagnosis of Orthopaedic Oncology2nd Edition Lippincott Williams & Wilkins.2007.Chapter 3. Cartilage (Chondrogenic) Lesions P.186
- 5. Aaron M. Chamberlain & Kane L. Anderson & Benjamin Hoch & Thomas E. Trumble & Jason S. Weisstein Benign Parosteal Osteochondromatous Proliferation of the Hand Originally Diagnosed as Osteochondroma: A Report of Two Cases and Review Hand 2010; 5:106–110
- 6. Athanasian E A. Bone and Soft Tissue Tumors. In Green DP, Hotchkis RN, Pederson WC. ed Green's Operative Hand Surgery. 4th ed. Philadelphia: Churchill & Livingstone, 1999:p2236.
- 7. J L Soon, H C Chang, C S Sim, L C Teoh, C O Low A Case of Bizarre Parosteal Osteochondromatous Proliferation of the Hand Singapore Med J 2003;44:027-030
- 8. Tunnel Syndromes : peripheral nerve compression syndromes / Marko Pecina, Jelena Krmpotic-Nemanic, Andrew Markiewitz.--3rd ed. USA2001:p4