Osteo-nevus of Nanta

Jin hee Kang, Miri Kim, Baik Kee Cho, Hyun Jeong Park

Department of Dermatology, Yeouido St. Mary’s Hospital,
College of Medicine, The Catholic University of Korea
Introduction

• Osteo-nevus of Nanta
  – Osseous metaplasia in a benign melanocytic nevus, uncommon phenomenon
  – Melanocytic nevus with bone was first described by Heidingsfeld, in 1908.
  – Ever since Nanta reported on it in detail in 1911, it has been called “Osteo-nevus of Nanta”.
• Osteo-nevus of Nanta

– Secondary cutaneous ossification has been reported in various lesions including acne, melanocytic nevi, pilomatrixoma, epidermoid cyst, basal cell carcinoma, melanoma and so on.

– Among these, pigmented nevus associated with secondary ossification is known as osteo-nevus of Nanta.

– To our knowledge, only few cases have been reported so far in the literature.
CASE

- **F/63**
- **Chief complaint** Asymptomatic, nodule on her Lt. cheek
- **Gross apperance** Asymptomatic, two, grouped, 0.8cm and 0.3cm-sized, skin-colored, dome-shaped, soft nodules with hairs on the Lt. cheek for 40 years
- **Past history** No trauma history and previous therapy
- **Treatment** Excision and biopsy
Figure 2. (A,B) Histopathologic findings revealed nests of nevus cells throughout the entire dermis (H&E, x40, x100). (C) Nevus cells consist of cord and nest, (H&E, x400).
Figure 3. (A) Histopathologic findings revealed rounded eosinophilic ossification beneath the nevus cell nests in the lower dermis (H&E, x100). (B) Histopathologic findings revealed bony spicules contained numerous osteocytes (H&E, x400).
Discussion

• Osteo-nevus of Nanta
  – Ectopic bone formation in intradermal nevus
  – Bone formation was usually present at the base of the melanocytic lesions, frequently located in upper part of the body.
  – Higher incidence of this phenomenon in females
    ▪ Effects of estrogen on osteoblasts and lack of osteoclastic activity
  – Increasing alkaline phosphatase and osteonectin activity
Discussion

• *Histopathology*

  – Nests of nevus cells within the dermis
  
  – Ossification within or just beneath the nevus cell nests
  
  – Bony spicules containing osteocytes and osteoclasts
  
  – Osteoblasts and harversian canals are also often present.
Herein, we present a unique case of osseous metaplasia within a benign intradermal melanocytic nevus, osteo-nevus of Nanta, in a female patient.
Reference


