## JOURNAL OF HEALTH SCIENCES AND MEDICINE

Sağlık Bilimleri ve Tıp Dergisi

J Health Sci Med 2019; 2(1): 38-39

Letter to the Editor / Editöre Mektup

# Asymptomatic trochlear calcification with Behcet disease

## Behçet tanılı hastada asemptomatik troklear kalsifikasyon

#### 厄 Emrah Doğan

Muğla Sıtkı Koçman University, Training and Research Hospital Hospital, Department of Radiology

#### Dear Editor;

The trochlea is a structure formed by cartilaginous tissue. It is located in the superomedial part in the orbit. This structure permits unimpeded movement of the superior oblique tendon and sheath (1). We may frequently encounter incidental calcification of the trochlea on routine CT scans (1,2). They observed an increased prevalence of trochlear calcifications (TC) in male patients (3). TC is important since it can be an early sign for some disease. It's especially valuable in patient under 40 years old as an early mean of diagnosis of diabetes mellitus (1,2). According to some reports in previous studies, TC can accompany diseases that may create organ calcifications such as autoimmune disorders (including rheumatoid arthritis, systemic lupus erythematosus, Crohn disease, Sjogren syndrome and scleroderma), endocrine diseases and chronic renal insufficiency. TC can be also seen among patients with dysregulations in calcium homeostasis (high serum calcium and alkaline phosphatase levels). Moreover, TC seems to be associated to alcoholism and HIV Infection (1,4).

Certain traumatic mechanisms can induct calcification of the trochlear apparatus. Generally, it takes a

Accepted: 22.11.2018

long time for calcification to occur after trauma (3). Even, TC can be confused with a foreign body in post-traumatic patients (5).

Radiologically, it is bilateral. Location of TC is specific in the superomedial orbital part corresponding synovial sheath and superior oblique muscle. However, pathologic correlation is not available (2).

Our case is about 36 years old male patient newly diagnosed as behcet disease. Patient didn't report ophthalmological complaint and only had a mild grade myopia. He was admitted to hospital with infection symptoms several times. In the antecedent, we found a history of pharyngitis, urethritis, bronchopneumonia and upper respiratory tract infection. He was even admitted to the ENT department because the nasal deviation was considered to be a cause of remitting infection. In biochemistry reports; there was no abnormality. ALP and calcium level were also normal.

Several explorations by different specialties were asked before the diagnosis of behcet disease was made. We detected in old patient's radiological reports and graphics the presence of TC from a long time. In the radiological imaging, there was bilate-

E-mail: dr\_e\_dogan@hotmail.com

Received: 16.10.2018

Doi: 10.32322/jhsm.471077

**Corresponding Author:** Emrah Doğan, Muğla Sıtkı Koçman University, Education and Research Hospital, Department of Radiology, Muğla, Turkey

Cite this article as: Doğan E. Asymptomatic trochlear calcification with Behcet disease. J Health Sci Med 2019; 2(1); 38-39.





**Picture 1.** Crescentic bilaterally calcifications in antero medial border of orbit in axial CT images

**Picture 2.** Superomedial localisation of TC in coronal CT images

rally supero-medial orbital calcifications with crescentic shape (Picture 1,2).

TC are commonly encountered entity in orbital radiological reports. It can be seen unimportant and generally even not noticed but it may be a valuable a sign of some diseases, especially when it is bigger and has a crescentic shape like in our patient. Our case is remarkable since association between behcet disease and TC was not reported previously in the literature despite of its belonging to the group of autoimmune diseases. Moreover, our patient was younger than 40 years old and reports in the literature highlighted that TC can be an early sign of diseases if detected in this age group. Finding TC in young patients is more valuable as it will help diagnose the disease at an early stage.

### **DECLARATION OF CONFLICTING INTERESTS**

The author declared no conflicts of interest with respect to the authorship and/or publication of this article.

#### REFERENCES

- Buch K, Nadgir RN, Tannenbaum AD, Ozonoff A, Fujita A, Sakai O. Clinical significance of trochlear calcifications in the Orbit. AJNR Am J Neuroradiol 2014 Mar; 35: 573-7.
- Hart BL, Spar JA, Orrison WW Jr. Calcification of the trochlear apparatus of the orbit: CT appearance and association with diabetes and age. AJR Am J Roentgenol 1992 Dec; 159: 1291-4.
- 3. KoS, KimY. Incidence of calcification of the trochlear apparatus in the orbit, Korean J Ophthalmol 2010; 24: 1-3.
- 4. Nanke Y, Kotake S, Akama H, et al. Alkaline phosphatase in rheumatoid arthritis patients: possible contribution of bone-type ALP to the raised activities of ALP in rheumatoid arthritis patients. Clin Rheumatol 2002; 21: 198–202.
- Sobel RK, Goldstein SM. Trochlear calcification: a common entity. Orbit 2012 Apr; 31: 94-6.