Hand Enchondromas In 51 Korean Patients: Clinical Characteristics And Treatment Outcomes

Different From Western Reports

Seung Han Shin, Yoon Vin Kim, Jin-Woo Kang, Yang-Guk Chung

Department of Orthopedic Surgery, Seoul St. Mary’s hospital, College of Medicine, The Catholic University of Korea, Seoul, Republic of Korea

ABSTRACT

Background: Enchondroma develops most commonly in the hand. However, there are a few western reports only.

Purposes: In this study we investigated clinical characteristics and treatment outcomes of hand enchondromas in Korean patients.

Patients and Methods: We retrospectively reviewed 51 patients with hand enchondromas, treated in a single institute between 2006 and 2014. Inclusion criteria were surgical treatment and pathologic confirmation; enchondromatosis syndromes were excluded from the study. Mean clinical follow-up duration was 22 months (range, 3-96).

Results: During the inclusion period, hand cases were 69% of all pathology-proven enchondromas. Mean age at presentation was 34 years in hand cases and 44 years in enchondromas of other regions. Fracture at presentation was identified only in 15.7% of hand cases, and was not identified in enchondromas of other regions. Tumor removal was performed by curettage in all cases. The defect after curettage was filled with autogenous cancellous bone graft in 80%, allogenic cancellous bone graft in 16%, and mixed autogenous and allogenic cancellous bone graft in 2%, and nothing in 2%. No patient developed tumor recurrence or fracture after surgery. Healing quality was Tordai grade 1 in 93%, and grade 3 in 7%. Time to grade 1 healing was 12 weeks (range, 4-56).

Conclusions: Fracture at presentation was less common in Korean hand enchondroma patients. Hand enchondromas have good prognosis after surgery, and surgery appears to be effective for fracture prevention. Time to healing was shorter in our series, as compared to previous reports.