

10TH GLOBAL ORTHOPEDICIANS ANNUAL MEETING

July 03-04, 2017 Kuala Lumpur, Malaysia

Reconstruction of the ankle after wide resection of distal fibula tumors: Case series and review of the literature

Mohammed Al-Rumaih¹, Munzier Abbasher², Osama Al-Shaya², Hasan Sawan², Adel Al-Kenani³ and Naif Al-Shaqha³

¹Al-Imam Mohammed Ibn Saud Islamic University, KSA

²King Fahad Medical City, KSA

³Dar Al-Ulom University, KSA

Background: Involvement of the distal part of fibula by benign aggressive and malignant tumors remains to be a challenge for the treating surgeons. Such lesions require resection that consequently results in ankle instability. Due to rarity of the condition, reconstruction techniques vary, with variable results. The fibula is affected in 2.4% of primary bone tumors, with the proximal third being more frequently involved than the distal segment. Malignancies of the distal third of the fibula carry a better prognosis than proximal lesions, although some authors have not observed such prognostic difference.

Case Presentation: We report 2 cases, all of them having Ewing's sarcoma in the distal fibula. We investigated them systemically and locally by doing X-ray, CT scan, MRI and bone scan. Wide resection of tumor was followed. The ruminant of tendons of the peroneus longus, peroneus brevis and flexor hallucis longus were cut and they were used to reconstruct the lateral aspect of the right and left ankle using suture anchors. K-wires were used to do temporary arthrodesis.

Outcome: The last MRI was done. It showed there is altered signal intensity of the soft tissue with post-contrast enhancement. However, the dimensions of this area of altered signal intensity are decreased as compared to previous MRI. There is no evidence of soft tissue mass lesion. According to the last patient's follow up after six months post-operative, no valgus deviation was noted, normal ankle motion, mobilizing full weight bearing with splint assistant during physical examination. Also, X-rays and MRI findings are shown no residual mass lesion or local recurrence.

Discussion: Overall, the rarity of the condition makes it difficult to choose which technique to be advantageous over the other. A step wise approach would limit and narrow your options and a decision based on several factors that should be addressed, like the type and nature of the tumor, site, age of patient, involvement of growth plate, invasion of surrounding soft tissues (e.g. peroneus tendons) and the need for post-operative radiotherapy and chemotherapy should be considered.

m.h.alrumaih@gmail.com