

Dorsal Cheilectomy: A Surgical Remedy for Hallux Rigidus - A Case Report

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INTRODUCTION:

Hallux rigidus is a painful condition that results in osteoarthritis and reduced range of motion of the first metatarsophalangeal joint (MTPJ). Cheilectomy is a well-known procedure frequently used to relieve arthritic pain in the MTPJ. This surgery is often combined with soft tissue release and osteotomy and is a primary treatment for hallux rigidus. The condition's cause is unclear, but proposed factors include anatomy, flattening or squaring of the metatarsals, osteoarthritis, and repetitive trauma, particularly in athletes. Cheilectomy is recommended for earlier stages, like in our case, when successfully treated by dorsal cheilectomy.

REPORT:

A 51-year-old lady presented with chronic pain of the right 1st metatarsophalangeal joint (MTPJ) associated with stiffness for four years. The pain progressively worsens, particularly by prolonged walking, and is most pronounced by day's end. Clinical examination revealed a painful bump with restricted dorsiflexion in 1st metatarsal-phalanges joint.

The radiograph lateral view of the foot on standing (Figure. 1) showed dorsal osteophytes with mild joint space narrowing (Grade II Hattrup and Johnson classification). Both clinical examination and radiograph indicate hallux rigidus of the right big toe.

Surgery was performed on her. Dorsal cheilectomy is done by removing 50% of dorsal osteophytes with microfracture of the 1st metatarsal articular surface using K-wire. (Figure 2,3). Six weeks postoperatively, significant pain relief and improved range of motion were observed, and the patient was satisfied with the outcome.



Figure 1



Figure 2



Figure 3

CONCLUSION:

In summary, dorsal cheilectomy represents an effective surgical solution for hallux rigidus, offering relief from arthritic pain and restoration of joint function. With careful patient selection and meticulous surgical technique, dorsal cheilectomy significantly manages this foot condition.

REFERENCES:

1. Brosky TA 2nd, Menke CR, Xenos D. Reconstruction of the first metatarsophalangeal joint following post-cheilectomy avascular necrosis of the first metatarsal head: a case report. *J Foot Ankle Surg.* 2009;48(1):61-69. doi: 10.1053/j.jfas.2008.10.002