

Use of Non-Operative Approach Along with Bone Healing Supplement for the Management of 5th Metatarsal Fracture

Bhavin Doshi*

Department of Orthopaedic Surgery, Thunga Hospitals, Mumbai, India

***Corresponding Author:** Bhavin Doshi, Department of Orthopaedic Surgery, Thunga Hospitals, Mumbai, India.

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Abstract

A 45 year-old male patient complained of pain and swelling over the lateral aspect of his left foot, along with difficulty in walking and stair climbing. Two days ago, the patient twisted his left foot while walking, resulting in a fall and leading to this injury. He had consulted the local doctor immediately and underwent primary treatment, but his symptoms did not resolve. He had a history of T2DM and hypertension and was taking medication for the same.

Keywords: X-ray; Swelling; Redness

Case Presentation

Examination

- Pain, swelling and redness was found over the base of the lateral aspect of left foot in the 5th metatarsal region.
- No open wound was present.
- Sensations were normal.
- Mild deformity was present.

Radiography:

X-ray of the left foot on AP view indicated fracture of the base of 5th metatarsal bone. No associated subluxation or dislocation was seen.



Figure 1: Fracture of base of 5th metatarsal on X-ray.



Figure 2: Post-recovery X-ray.

Diagnosis

The patient was diagnosed with fracture of the base of 5th metatarsal bone of the left foot.

Management

The patient's left foot was immobilized in a below knee POP slab for one week. Analgesic and anti-inflammatory Aceclofenac+Paracetamol+Serratiopeptidase was prescribed. A fracture healing combination of Cissus Quadrangularis extract (500 mg), Calcium (1250 mg) and Vitamin K2-7 (45 mcg) was also prescribed.

Follow-up

- On follow-up examination after one week, swelling and pain had reduced. Below knee cast was to be continued for another two weeks and Cissus Quadrangularis extract (500 mg), Calcium (1250 mg) and Vitamin K2-7 (45 mcg) supplement was to be continued for two months.
- X-ray done at 8 weeks, showed complete healing of the fracture.

- Patient was comfortable and pain-free. He resumed work, one month after the fracture.

Discussion

CQ maintains the balance between bone formation mediated by osteoblast and bone resorption mediated by osteoclast to help the bone achieve its original shape.

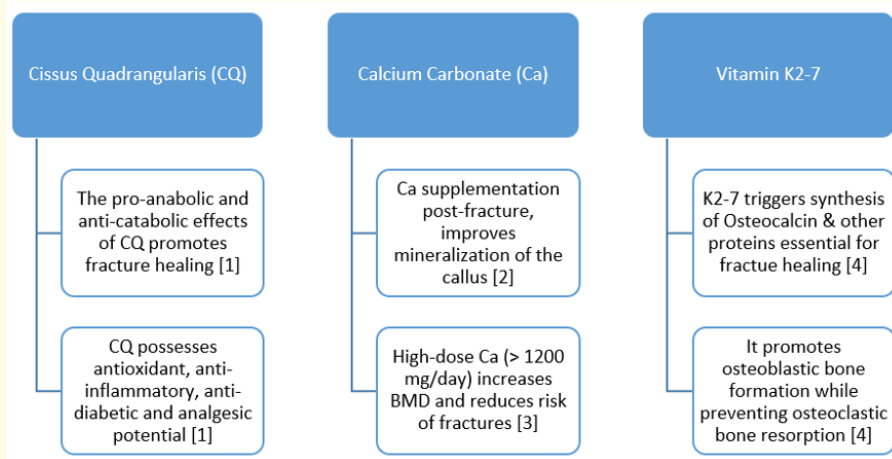


Figure 3: Role of Cissus Quadrangularis in bone formation [1].

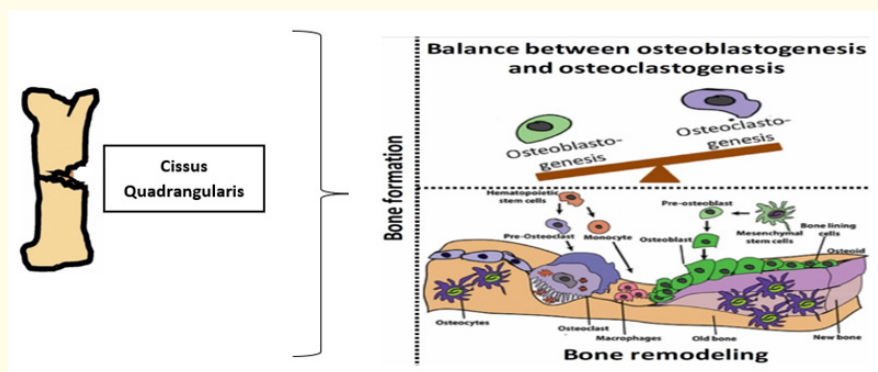


Figure 4

Conclusion

In fractures managed non-operatively, supplementation with a potent combination of Cissus Quadrangularis extract (500 mg), Calcium (1250 mg) and Vitamin K2-7 (45 mcg), aids in rapid bone repair and regeneration, while also resolving pain and inflammation. It also has a positive impact on bone strength, thus preventing risk of recurrent fractures.

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