

# Surgical Treatment of the First Carpometacarpal Joint Arthritis Using a Mini External Fixation System

## Purpose

Evaluation of our primary results from the use of a mini ex-fix system for the treatment of the first carpometacarpal joint arthritis [1-3] (Figure1).

## Method

We admitted in our clinic 10 patients the last 2 years. 7 females, 3 males, all of them were agriculture workers. The main age 62 was years old (55-72y).

All the patients complained for pain and tenderness to the base of the thumb more than 3 years and presented decrease grip strength [4].

In all the patients the anaesthesia was axillary block.

After an open debridement of the first carpometacarpal joint (Figure 2) we apply, under x-ray control, a mini ex-fix system [3,5] (Figure 3).

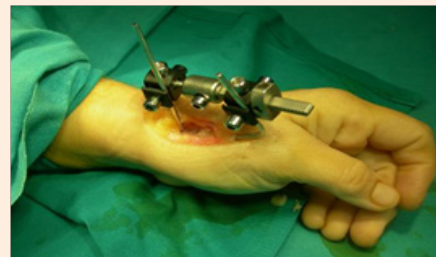
It's very important the application of the first needle of the system to cause compression between the base of the first metacarpal and the trapezium (Figure 4 & 5) [6-10].



**Figure 1:** Mini ex-fix system for the treatment of the first carpometacarpal joint arthritis.



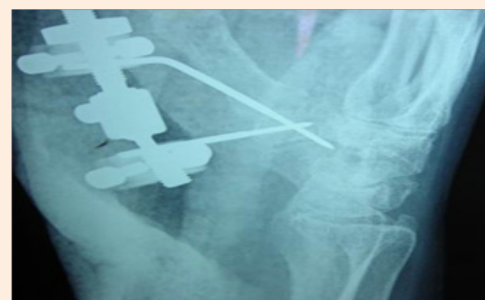
**Figure 2:** After an open debridement of the first carpometacarpal joint.



**Figure 3:** Under x-ray control, a mini ex-fix system.



**Figure 4:** Under x-ray control, a mini ex-fix system.



**Figure 5:** Under x-ray control, a mini ex-fix system.

Mini Review

Volume 3 Issue 4 - 2015

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Received: October 14, 2015 | Published: October 27, 2015

## Results

In all the patients the system was removed after six weeks in outpatient clinic.

One patient had a pin track infection which was treated by oral antibiotics.

The post-op evaluation of the patients includes clinical examination and x-ray control.

All the patients had a short course of physical therapy post-op [11-16].

All the patients had complete pain relief and most of them returned to their previous activity after 3 months postoperative [17-18].

## Conclusion

Even that the number of the patients and the follow up is short we believe that the above method is a safe and rigid method with satisfactory results (Figure 6) [19,20].



**Figure 6:** After treatment.

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