

## How to prevent the avulsed soft tissues from wrapping around the K-wire

Bulent Ozcelik, Onur Egemen and Bulent Sacak  
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## How to prevent the avulsed soft tissues from wrapping around the K-wire

Dear Sir,

Bony fixation methods for amputated digits must be simple, easy to use, create minimal additional bone and soft tissue damage and must be applicable with speed and consistency (Gordon and Monsanto, 1987; Whitney et al., 1990). Various methods such as fixation with single or multiple K-wires, intraosseous wires, plates and screws and external fixation have been reported for this purpose (Yamano et al., 1982). All these methods provide adequate fixation when used properly.

We prefer to obtain fixation with crossed K-wires in digital replantation cases in our clinic. Use of K-wires produces acceptable alignment and adequate fixation in our hands. However, in amputations with avulsion of soft tissues, placing the K-wires may be troublesome. It is difficult to retract the avulsed and stretched vessels, nerves and tendinous structures away from the K-wire while trying to obtain proper alignment of the amputated and fractured segments. Despite all efforts, these vital soft tissues are frequently wrapped around the K-wires.



**Figure 1.** The soft tube prevents the median nerve and tendons from wrapping around the K-wire during fixation of a metacarpal bone fracture.

After dealing many times with this problem, we have found a way to place the K-wire safely in cases with avulsed soft tissues. Before inserting the wire into the bone, we first pass it through a plastic aspiration tube that is 5 cm in length and slightly wider than the wire (Figure 1). The soft tube not only keeps the soft tissues away from the K-wire which is rotating at high speed but also does not restrict its movements. This simple solution can be applied whenever there is a risk of wrapping soft tissues around the K-wire and difficulty in retracting the soft tissues.

### Conflict of interests

None declared.

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Bulent Ozcelik MD, Onur Egemen MD  
and Bulent Sacak MD

*Ist-El Hand Surgery, Microsurgery and Rehabilitation Group, Okmeydani Education and Research Hospital, and Bagcilar Education and Research Hospital, Istanbul, Turkey*  
Email: [onuregemen@gmail.com](mailto:onuregemen@gmail.com)

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