

# A safe, simple and cost-effective method of set up for wrist arthroscopy

**Keywords:** Wrist arthroscopy

## Introduction

There are many indications for wrist arthroscopy<sup>1</sup> and for it to be conducted safely and successfully, correct patient positioning and set up is paramount. There are numerous specifically designed commercial wrist arthroscopy sets available to facilitate this. Though providing excellent surgical access, they do bear a significant financial burden in addition to requiring expertise of their construction. We present a simple and universally available method of set up using equipment readily available in most operating theatres. This could be of particular use in centres where commercial towers may not be financially viable or indeed as an alternative when bespoke equipment fails.

## Method

The appropriately anaesthetised patient is positioned supine with an arm table attached on the operative side. An above elbow tourniquet is applied. A drip stand is then attached to the table at the level of the shoulder on the surgical side. The limb is prepared and draped, such that the sterile sheets completely cover the drip stand. Chinese finger traps are then placed upon the index and middle fingers. A four-inch crepe bandage is securely tied in to a loop and then hung from the drip stand. The finger traps can then be suspended from this so that the elbow is approximately six-inches from the arm table (Figure 1). The remainder of the four-inch crepe bandage is looped around the upper limb and tied underneath the arm table in to another loop, from which counter-traction weights can be suspended (Figure 2). We recommend sufficient counter traction such that the metacarpophalangeal (MCP) joints of the index and middle fingers are both palpably and visibly distracted (Figure 3). This should enable adequate joint distraction, in addition to being able to manipulate the wrist in both coronal and sagittal planes as required during arthroscopic assessment. The set-up and traction is now complete, providing excellent access for portal placement and subsequent safe arthroscopy. This avoids the scuffing of the wrist and carpus that may occur when instruments are inserted in the context of suboptimal traction.



**Figure 1** Patient supine with finger trap suspension from draped drip stand.



**Figure 2** Crepe bandage looped around upper limb. Weights are suspended from this to provide appropriate counter traction.



**Figure 3** Counter traction provided until index and middle finger MCP joints visibly and palpably distracted.

## Conclusion

This simple and cost efficient method of wrist arthroscopy set up uses equipment that is readily available in most hospitals. It is safe,

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simple and quick to construct, adding minimal cost to the procedure. Excellent traction and counter-traction is achieved throughout for safe and thorough arthroscopic surgery of the wrist and carpus. This is the method of choice of the senior author who regularly performs complex arthroscopic procedures of this region.

## References

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