

## Brief Communication

# A simple method for immobilising the upper limb following groin or abdominal flaps for soft tissue defects in the hand

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### ABSTRACT

Abdominal and groin flaps are the main workhorse for soft tissue defects in hand injuries. A simple and easy method is being described for immobilising the upper limb following abdominal and groin flaps for soft tissue defects of the hand using commonly available clavicular braces. This is devoid of all the problems of immobilisation using the common methods such as adhesive plasters and pin fixators and has its own advantages.

### KEY WORDS

Groin flap, Abdominal flap, Immobilisation.

### INTRODUCTION

Abdominal and groin flaps are the main workhorses for soft tissue defects in hand injuries. Proper immobilisation of the upper limb is very important for the survival of the flap and hence the final outcome of the surgery. There are various methods of immobilising the upper limb following groin or abdominal flaps. Conventionally used material includes Dynaplast® adhesive plaster. Some surgeons have also used pins and external fixation methods<sup>1-3</sup> to bring about the same. Some of the problems with these methods are that patients may be allergic to adhesive plaster.<sup>4</sup> Adhesive plasters are expensive. Removal of adhesive plaster over hairy chest or abdomen may be painful. Regular nursing and sponge bath may be cumbersome with the adhesive plaster without replacing it. Passing pins through the

soft cancellous bone in the iliac crest is technically demanding and they may become loose and get infected, even when used for a short period for three weeks.

### MATERIALS AND METHODS

We have been using two soft spongy clavicular braces (Figure 1) to immobilize the upper limb following groin flaps. Clavicular brace is made up of a long sponge piece covered with stokinette and provided with Velcro strapping stitched at either ends. It comes in various lengths from 30-55 inches, with an increment of 2 inches for pediatric and adult patients. They are readymade and easily available.

Two such clavicular braces of appropriate lengths are chosen and are used as shown in the diagram (Figure 2)



**Figure 1:** Showing clavicular braces



**Figure 2:** Showing the method of immobilising the upper limb following groin flap in hand injury

to fasten the forearm and arm to the torso with appropriate tension. These are non adhesive and hence the tension can be adjusted according to the need. These braces are inexpensive (approx. Rs. 40.00) compared to Dynaplast adhesive plasters which also needs frequent and painful changes. These restraints can be temporarily loosened or removed during nursing and sponge baths. If soiled, these braces can still be used after washing or by donning clean and dry stokinette over them. In most instances this method is quite adequate to do the job satisfactorily. We believe that invasive methods of immobilising the hand following groin, abdominal flap using external fixator should be restricted only in such severe cases where extremes of position (full supination or full pronation) is required for the complete attachment of the flap.

## CONCLUSION

In conclusion, a simple handy method of immobilising the upper limb following groin or abdominal flap cover has been described using readily available clavicular braces avoiding cumbersome adhesive plaster.

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