

Clinical Pearls



LEATHER, THE FORGOTTEN STRAPPING MATERIAL

Although hook and loop closure is readily available and serves as a quick, efficient, and convenient strapping material for splints, the use of leather straps for selected circumstances can be a great advantage, increasing tolerance to the concentrated pressure of a strap. Leather is the only natural or manmade material which will conform perfectly to the underlying contour, making it the most desirable strapping material to comfortably distribute pressure. To use leather, one must have the ability to sew hook/loop closure to one end of the leather strap and to attach the other end of the leather strap to the thermoplastic base using rapid rivets.

The circumstances that merit consideration of leather strapping are:

1. Straps on splints for chronic problems; these straps are often in place for long periods of time, re-

quiring even distribution of pressure.

2. Straps that cross delicate skin, tenuous scar, or hold against the strong pull of spasticity.

3. Straps for splints on babies and children; the contouring of the leather allows a better grasp on the skin when the shape of the underlying bony contour is not well defined.

4. Straps that must cross deformed joints or bone; examples are rheumatoid joints with deformity or preexisting pressure areas over a bony prominence.

Hint: Unfinished leather will absorb body oil readily and can easily be molded by wetting the leather and letting it dry while the strap is in place.



Leather straps are used with other strapping materials in a splint for long term wear following excision of a malignancy and full thickness graft on the palmar aspect of the ring and little fingers.



Leather straps are used to secure a young child's hand in a splint to reduce the PIP joint flexion contracture resulting from camptodactyly.



A leather strap is placed over the dorsum of the proximal phalanx where a previous splint has created a pressure area. Note the edge of the strap has been clipped to relieve edge pressure.