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Complex made Simple...clinically relevant education by Judy C. Colditz, OT/L, CHT, FAOTA

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WHY I DISLIKE ULNAR/RADIAL GUTTER SPLINTS!!

Perhaps it is the name "gutter" I dislike. But long ago I quit making splints that encase only the radial or ulnar aspect of the wrist and hand.

The indication for such a splint/orthosis is likely a metacarpal fracture. Although such a design (Figure1) provides the necessary stability to the healing fracture, it is challenging to make it comfortable for the patient. The edge of the splint always rests at the midline of the wrist dorsally and volarly, providing uncomfortable pressure points.

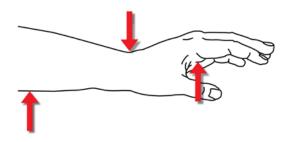
If one of the goals of the splint is to stabilize the wrist, respecting the basic principle of three points of well distributed pressure (Figure 2) will increase comfort. This can only be accomplished by eliminating the edge of the splint at the wrist level which can be eas-

ily done by simply extending the splinting material further across the dorsum of the wrist as well as extending the palmar splinting material further across. With flexible thermoplastic splinting materials this extended design still allows application and removal of the splint as needed, while greatly increasing the patient's comfort.

Another reason the ulnar or radial gutter splint is uncomfortable may be its ability to shift on the patient's arm because the straps do not stabilize it. Either wrapping the gutter splint in place with an elastic wrap or making wide but self contouring straps (neoprene or leather) can also potentially increase comfort. The final question is always "Could you comfortably wear the splint you have made?"



Typical ulnar gutter splint with straps.



Splint should cover the three points of pressure comfortably.