In after-treatment, be careful. Pins can also break in the upper extremity from excessive activity before healing is solid.

The same guidelines apply here as in the lower extremity except that we are not concerned with weight bearing. Fracture of the pin, of proper size, in a normally healing bone is extremely unlikely if caution is exercised in the aftercare of the patient. In the humerus shaft, there is little likelihood of pin fracture when the pin used is one-fourth inch in diameter. In the forearm use pins at least one-eighth inch in diameter if possible.

Here too, the aftercare of each patient must be individualized. The shoulder spica cast is very rarely indicated. Most fractures of the shafts of the humerus, the radius and ulna can be fixed stably enough that external splinting is not necessary. Many fractures near the elbow require splinting. When splinting is necessary, we usually use the K E S dressing postoperatively.

Follow all cases closely with frequent x-rays. Remember that fractures of the mid-shaft of the ulna in adults are prone to non-union. Comminuted Colles fracture and fractures of osteoporotic bones may require splinting. A light hanging case and the Jones sling are often useful.

In the aged edema of the hands and fingers is a problem when splints or cases are used. In such cases as Colles fracture we feel that some deformity should be accepted in these cases if necessary to secure early and complete function.