

## DEFORMITY

Radial and palmar angulations of the distal radius associated with an ulna-plus wrist. It is due to growth plate disturbance in which the palmar and ulnar portion of the distal radial physis fuses earlier than the rest of the physis.

**Causes:** Idiopathic, dysplasia, trauma, chromosomal abnormalities, infection, and tumors.

### Clinical

Adolescent girls are more commonly affected

Deformity is obvious 12 years [growth spurt]

Bilateral is common

Usually no disability

Cosmesis is a problem



## **Management**

- |   |   |
|---|---|
| 1. If the deformity is not painful                | No treatment is necessary,                    |
| 2. If the deformity painful and Immature skeleton | Physiolysis                                   |
| 3. If painful and mature patient:                 | Open Osteotomy of radius and ulnar shortening |

## **Ulnar shortening**

Posterolateral incision

Shorten distal ulnar with a 4 holed plate

Prepare the distal two holes, then make a transverse osteotomy.

## **Radial osteotomy**

When there is “no evidence of ulna plus hand” with a Madelung disease

Dorsal approach between II and III compartment

2 K wires used as a marker for osteotomy

Plan the distal cut to reduce radial angulation to 20° and palmar angulation to 10°.

The radius osteotomy should be as close to the radiocarpal joint as possible, leaving room for a T or L plate for internal fixation.

Provisionally fix the osteotomy with Kirschner wires and then with a low profile plate