

Radioulnar synostosis

Radioulnar synostosis

Failure of proximal separation of the embryonic radius and ulna means that the forearm has no ability to pronate/supinate. The hand, on the end of the forearm, is therefore in a fixed position along the arc from full pronation-neutral-full supination. The child presents if this fixed position results in functional difficulties. Osteotomy of the forearm bones changes the fixed position (for example, from pronation to neutral) but does not restore movement. The choice of the postoperative position depends on hand dominance, cultural considerations and functional demands. Undoing the synostosis is not successful. Mary Clayton Holt, 1924-1993, cardiologist, The London Hospital for Women and Children, London, UK. Samuel Oram, 1913-1991, cardiologist, King's College Hospital, London, UK. Holt and Oram described this syndrome in a joint paper in 1960.

(b) Figure 44.33 Radial head dislocation: (a) lateral radiograph of a forearm showing a proximal radioulnar synostosis with a congenital posterolateral dislocation of the radial head. Note the underdeveloped radial head and neck and compare with (b), a lateral radiograph of a traumatic

anterior dislocation of the radial head with a normal appearance

to the head and neck and a deformity in the proximal ulna.

Radioulnar synostosis

Failure of proximal separation of the embryonic radius and ulna means that the forearm has no ability to pronate/supinate. The hand, on the end of the forearm, is therefore in a fixed position along the arc from full pronation-neutral-full supination. The child presents if this fixed position results in functional disabilities. Osteotomy of the forearm bones changes the fixed position (for example, from pronation to neutral) but does not restore movement. The choice of the postoperative position depends on hand dominance, cultural considerations and functional demands. Undoing the synostosis is not successful. Mary Clayton Holt, 1924-1993, cardiologist, The London Hospital for Women and Children, London, UK. Samuel Oram, 1913-1991, cardiologist, King's College Hospital, London, UK. Holt and Oram described this syndrome in a joint paper in 1960.

(b) Figure 44.33 Radial head dislocation: (a) lateral radiograph of a forearm showing a proximal radioulnar synostosis with a congenital posterolateral dislocation of the radial head. Note

the underdeveloped radial head and neck and compare with (b) , a lateral radiograph of a traumatic anterior dislocation of the radial head with a normal appearance

to the head and neck and a deformity in the proximal ulna.

Radioulnar synostosis

Failure of proximal separation of the embryonic radius and ulna means that the forearm has no ability to pronate/supinate. The hand, on the end of the forearm, is therefore in a fixed position along the arc from full pronation-neutral-full supination. The child presents if this fixed position results in functional difficulties. Osteotomy of the forearm bones changes the fixed position (for example, from pronation to neutral) but does not restore movement. The choice of the postoperative position depends on hand dominance, cultural considerations and functional demands. Undoing the synostosis is not successful. Mary Clayton Holt , 1924-1993, cardiologist, The London Hospital for Women and Children, London, UK. Samuel Oram , 1913-1991, cardiologist, King's College Hospital, London, UK. Holt and Oram described this syndrome in a joint paper in 1960.

(b) Figure 44.33 Radial head dislocation: (a) lateral radiograph of a forearm showing a proximal

radioulnar synostosis with a congenital posterolateral dislocation of the radial head. Note the underdeveloped radial head and neck and compare with (b) , a lateral radiograph of a traumatic anterior dislocation of the radial head with a normal appearance to the head and neck and a deformity in the proximal ulna.

Revision #1

Created 2025-12-31 15:16:53 UTC by Omar Ayman

Updated 2025-12-31 15:16:53 UTC by Omar Ayman