

## SPOT DIAGNOSIS (IMAGE GALLERY)



### FUSION OF INTERPHALANGEAL JOINTS

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A 14 months old boy presented with limitations of movement in his index, middle and ring fingers of both hands since birth. On examination, his affected fingers were stiff and flexion was present only at metacarpophalangeal joint. Flexion movement was restricted at the interphalangeal joints (both proximal and distal). There was no local swelling or tenderness. All the other joints, bones and systems were normal. X ray of both the hands revealed bony fusion at proximal interphalangeal joint.

#### What is the diagnosis?

Symphalangism is a rare congenital anomaly characterized by ankylosis of interphalangeal joints of fingers and toes. (1) This autosomal dominant disorder was first described by Harvey Cushing in 1916. (2) Recent studies have revealed that the abnormal genes are localized on chromosome 17q22. (3) The fusion can occur in any finger. Little finger is most frequently involved, followed by ring, middle and index finger. (1) Index finger is generally involved only when other fingers are also involved. Involvement of both proximal and distal interphalangeal joints can occur, but proximal interphalangeal joint involvement is more common. (1) It may be associated with Poland, Apert, Herrmann, and multiple synostosis syndromes. (1,3) The treatment of symphalangism has been uniformly unsuccessful. Manipulations and arthroplasties can be applied and physical, occupational, and exercise therapies are usually beneficial. (3)

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#### References

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