

## DUPUYTREN'S CONTRACTURE RHEUMATOID ARTHRITIS AND EPIGASTRIC HERNIA

Dupuytren's contracture (DC) has been observed occasionally in association with peri-arthritis of the shoulder, gout and ulnar nerve damage.<sup>1</sup> In 5% of the cases, it may be associated with other fibrosing conditions such as knuckle pads, Peyronie's disease, keloid scarring or plantar fibromatosis.<sup>1</sup>

A 46-year-old farmer had a slowly progressive flexion deformity of the fourth fingers of both the hands for the last 5 years. In addition, about 2 years ago, he developed an asymptomatic, soft, reducible, midline swelling on the abdomen. This swelling used to increase in size slightly on raising the intra-abdominal pressure as during defaecation or cycling. For the last 15 months, the patient had gradually progressive pain and swelling of both the knees, elbows and proximal interphalangeal joints associated with morning stiffness of the joints. The distal interphalangeal joints, spine and sacro-iliac joints were not involved. There was no associated fever, fatigue, weight loss or other cutaneous or systemic involvement. There was no past history of epilepsy, chronic alcoholism or trauma. The family members were not affected. Examination revealed a grade III flexion deformity of the fourth fingers of both the hands. Both the knees, proximal interphalangeal joints and metacarpophalangeal joints were swollen and tender. A soft, reducible midline swelling, about 3 cm in diameter, was present about 6 cm above the umbilicus.

The hemogram and urinalysis were normal. ESR was 45. Mantoux and VDRL tests were negative. X-rays of all the joints were normal. The rheumatoid factor was positive while LE cell phenomenon and antinuclear factor were not present.

The aetiology of DC remains unknown. Various factors implicated include heredity,<sup>2</sup>

and fibroblastic proliferation disturbances.<sup>3</sup> Besides this, the microvascular injury and an increased number of synovial lining cells are considered to be the earliest lesion in rheumatoid arthritis where the maximum of bone and cartilage destruction occurs in juxtaposition to the inflamed synovium.<sup>4</sup> This vascular granulation tissue is composed of proliferating fibroblasts, small blood vessels, and a variable number of mononuclear cells.<sup>4</sup> Hence, a fibroblastic proliferation abnormality is also seen in rheumatoid arthritis, as proposed for the evolution of DC.<sup>2,3</sup>

A congenital weakness in the linea alba through which the preperitoneal fat may be forced out is atleast partially responsible for the development of epigastric hernia<sup>5</sup> and a positive correlation between the abnormal pattern of aponeurotic decussation and herniation has been observed.<sup>5</sup> The association of multiple connective tissue defects in this patient in the form of Dupuytren's contracture, rheumatoid arthritis and epigastric hernia is interesting.

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### References

1. Billing R, Baku R, Immergut M et al : Peyronie's disease, *Urology*, 1975; 6 : 409-418.
2. Ling RSM : The genetic factors in Dupuytren's contracture, *J Bone Joint Surg*, 1963; 45B : 709-718.
3. Larsen RD and Posch JL : Dupuytren's contracture with special reference to pathology, *J Bone Joint Surg*, 1958; 40 : 773-792.
4. Lipsky PE : Rheumatoid arthritis, in : *Harrison's Principles of Internal Medicine*, 11th ed, Editor, Braunwald E, Isselbacher KJ, Petersdorf RG et al : Mc Graw-Hill Book Co, New York, 1987; p 1423.