A 62 YEAR OLD MAN WITH PAIN AND STIFFNESS OF HANDS

Esha Das Gupta FRCP
Rheumatologist and Associate Professor, International Medical University, Seremban, Malaysia

Address for correspondence: Associate Professor Esha Das Gupta, International Medical University, Jalan Rasah, 70300 Seremban, Negeri Sembilan Darul Khusus, Malaysia. Tel: 06-767798, Fax: 06-7677709, Email: eshadas_gupta@imu.edu.my


The picture above shows the hands of a 62 year old carpenter who presented with pain and stiffness of the hands especially after getting up in the mornings. He consulted his family doctor and was told that his rheumatoid factor was positive.

QUESTION

(a) Describe the abnormalities in the hand.

(b) What is your diagnosis?

ANSWER

(a) There are bilateral joint swelling of both proximal interphalangeal (PIP) and distal interphalangeal (DIP) joints, along with interstitial muscle wasting.

(b) He has nodal osteoarthritis of the hands. The PIP and DIP joint swellings are bony and are called Bouchard's and Heberden's nodes respectively. In rheumatoid arthritis, DIP joints are usually not affected. Again 5% of normal elderly population may have positive rheumatoid factor.

Nodal Osteoarthritis is by far the most common type of osteoarthritis. This mainly affects women, and often starts in the 50s, around the time of the menopause. Most often it affects the base of the thumb and the joints at the end of the fingers. There is a strong genetic element to this type of osteoarthritis. Family studies suggest a polygenic mode of inheritance or possibly a dominant trait with variable penetrance. Mechanical factors have some role in determining which joints are involved. The onset of nodal osteoarthritis can be sudden, with hot, inflamed distal interphalangeal joints. The hands are stiff and painful. There may be presence of early morning stiffness, but not more than half an hour. Inflammation may spread to the proximal interphalangeal joints and the carpometacarpal joints of the thumbs. Treatment is aimed at the reduction of pain, caused by a variety of the pathological processes going on - inflammation, debris, venous stasis, capsular or muscle stretch, etc.

Further readings