Osteopoichylosis: An incidental radiological finding

Osteopoiquilosis: un hallazgo radiológico casual

To the Editor:

Osteopoichylosis is an infrequent and asymptomatic bone disease that is usually and accidentally diagnosed when undergoing an x-ray study. We now present the case of a 19 year old male who underwent an x-ray of both legs which found a pattern of bilateral and symmetric osteosclerotic lesions, characteristic of this disease.

A 19 year old male with no personal or family history of interest came to the clinic due to pain and swelling of the right ankle after spontaneous entorsis. The physical examination showed signs of inflammation and disability, with pain upon movement of the right ankle without a hematoma.

A posteroanterior x-ray of the ankle was performed, ruling out a fracture, but showing zones with an increase in radiological density, oval and well defined, small in diameter (2-4 mm), in the distal ephysial zone of the tibia and the fibula. In order to confirm the diagnosis, an anteroposterior of both legs was carried out where the lesions were seen to be symmetrical and affecting both the proximal and distal ephysis of both bones (Figure).

After finding the characteristic radiological image, the patient was reinterrogated regarding possible bone pathology in the family and the answer was negative. A detailed examination of the skin in search of lesions was negative. No other test (bone scan or MRI) was performed.

Osteopoichylia or osteopoichylosis is an asymptomatic sclerous bone dysplasia, of unspecified etiology. It is more frequent in men and familiar cases have been described, with autosomal dominant heredity.\(^2\)

In up to 25% of cases, accompanying skin lesions can be seen, receiving the name of Buschke-Ollendorff syndrome or osteodermatopoichylosis.\(^3\) Skin alterations come in the form of round or oval pale-yellow papules on the lumbar region, the buttocks, arms and muscles, with a certain symmetry, histologically being fibrocollagenous infiltrations similar to those of scleroderma.\(^4\)

It is clinically asymptomatic and leads to no deformity or alteration of the normal bone, making the diagnosis a radiological finding\(^5,6\): these typically are round or oval areas of bone sclerosis, rarely over 10 mm, symmetrical, well defined, with no cortical alteration and predominantly ephysial and metaphyseal in tubular bones, carpus, tarsus, pelvis and scapulae, rarely affecting the ribs, clavicles, spine and cranium. There is, therefore, polyostotic (several bones) and polytopic (several bone areas) affection.\(^7\)

Pathologic findings are characterized by the existence of oval areas of compact bone, localized in the spongy areas, indistinguishable of bone exostosis (bone islets).

The differential diagnosis has to be performed with osteoblastic metástasis, especially when they are asymmetrical or appear in patients over 40-50,\(^8\) with tuberous sclerosis and mast cells.\(^9\) A normal bone scan is used in these cases to rule out the presence of bone metastasis.

References


Figure 1.
What is the importance of nutrition in rheumatoid arthritis?

¿Cuál es la importancia de la nutrición en la artritis reumatoide?

To the Editor:

Historically, nutritional therapy for rheumatoid arthritis (RA) has been very appreciated by the medical community. Moreover, it has always been a topic of great interest to patients. It follows from this that medical practitioners need information on how best to respond the patients’ questions about what they should be eating in an attempt to control RA.

RA and musculoskeletal disorders are among the most common medical disorders. This disease is characterized by a chronic inflammation of the synovial tissue leading to cartilage and bone damage. Several environmental factors have been recognized as increasing the risk of developing RA and emerging scientific evidence supports the relationship between nutrition and RA. For instance, a consistent prospective, double-blind, and randomized trial found that olive oil supplementation was associated with lower risk of RA. Besides, well-designed and meta-analysis studies suggest that patients with RA should consume 3-6 g of omega 3 fatty acids (n-3) daily throughout ≥12 weeks. After taking n-3 supplements for this period, patients have reported reduction in joint pain intensity and in non-steroidal anti-inflammatory drugs dose. Recently, Dawczynski et al in a randomized, double-blind, placebo-controlled and cross-over study showed that the effects of dairy products moderately supplemented with n-3 did not improve RA activity. However, the long-term consumption of dairy products acts against the cartilage and bone destruction in RA.

Concerning other nutrients, a population-based prospective study revealed that the daily intake of one glass of orange juice (containing β-cryptoxanthin, a potent anti-inflammatory component of the diet) is associated with lower risk of developing RA. In line with this, another prospective cohort study with more than 29,000 women showed that the high intake of β-cryptoxanthin, zinc supplements and diets rich in fruits and cruciferous vegetables may also be protective against RA.

Figure 1. The possible effects of some components of the diet on the prevention and treatment of rheumatoid arthritis. COX indicates cyclooxygenase; IL, interleukin; LOX, lipoxygenase; LT, leucotriene; NSAID, non-steroidal anti-inflammatory drug; RvCSd, an oriental herbal mixture (Rv, Rhus verniciflua Stokes; C, Cinnamomum cassia; Sd, Saposhnikovia divaricata); TNF, tumor necrosis factor.

n-3 fatty acids, orange juice, β-cryptoxanthin, fruits, vegetables. Mediterranean-type diet, vitamin D, olive oil, cooked vegetables, zinc supplements, gingerol, chirayita, bromelin, turmeric, green tea and dairy products

α-tocopherol, β-caroteno, selenium, resvetarol, borage oil (starflower), soy isoflavone, cherry, and RvCSd

meat red, coffee, and iron

Improve life quality

↓ NSAID requirement

α-Lox

↓ Pain

↑ IL-10

COX-2

TNF-α, IL-1β, IL-6, IL-8

IL-17, Bhsp65

LT-4

↓ Pain

↑ IL-10

Benefic effects related to increased consumption

Probable benefic effects

Does the consumption should be reduced?