Case Report
Volume 15:2, 2021

Journal of Molecular and Genetic Medicine

ISSN: 1747-0862 Open Access

Disseminated Condensing Osteopathy

André D*, Gouveia F, Luís H, Gaspar J and Chaves AJ

Internal Medicine Department, Hospital Central do Funchal, Madeira Island, Portugal

Abstract

A 32-year-old female patient, with no personal history or habitual medication of relief, resorted to the emergency department for pain complaints following trauma to the left hemithorax, with no associated fracture. Imagiologically, the presence of symmetrical radiopaque changes affecting the joint regions at the level of the humerus, femurs and pelvic girdle was verified. Both in the objective examination and analytically, there were no changes. The patient continued to be followed up in Internal Medicine, with the diagnosis of Osteopoikilosis. This benign entity, of autosomal dominant transmission with variable penetrance, is often diagnosed by chance. It afflicts both genders and tends to appear in childhood, persisting throughout the patient's life. As a rule, they have a symmetrical distribution and affect just-articular areas of the bone skeleton.

Keywords: Disseminated Condensing Osteopathy • Osteopoikilosis • Hereditary Bone Disease • Radiography

Introduction

Disseminated Condensing Osteopathy (DCO), stained bone disease or osteopoikilosis, is a benign autosomal dominant disease with variable penetrance, often diagnosed by chance. It is an entity, usually asymptomatic, diagnosed accidentally and it afflicts both genders [1-3]. Pain is not a frequent characteristic of DCO, but in some patients is the presenting symptom [4]. These osteosclerotic dysplasias tend to appear in childhood, persisting throughout the patient's life. As a rule, they have a symmetrical distribution and affect just-articular areas of the bony skeleton, sparing blood, ribs and vertebrae [1-3].

Case Report

A 32-year-old female patient, with no personal history or habitual medication of relief, resorted to the emergency department for pain complaints following trauma to the left hemithorax, with no associated fracture. Imagiologically, the presence of symmetrical radiopaque changes affecting the joint regions at the level of the humerus, femurs and pelvic girdle was verified (Figures 1-3). Both in the objective examination and analytically, there were no changes. The patient continued to be followed up in Internal Medicine, with the diagnosis of Osteopoikilosis.

Discussion

DCO results from changes in maturation of the endochondral bone, resulting in focal radiopaque condensations in the radiographs of peri-articular areas, epiphyses and metaphyses of long bones. These sclerotic lesions, in bone scintigraphy, do not reveal an increased activity. Histologically they represent focal condensations of lamellar compact bone [1-4].

Differential diagnoses include osteoblastic bone metastases, melorheostosis, enchondromatosis, mastocytosis and chondrodysplasia. There are reports that this entity occurs with other pathologies, however, its

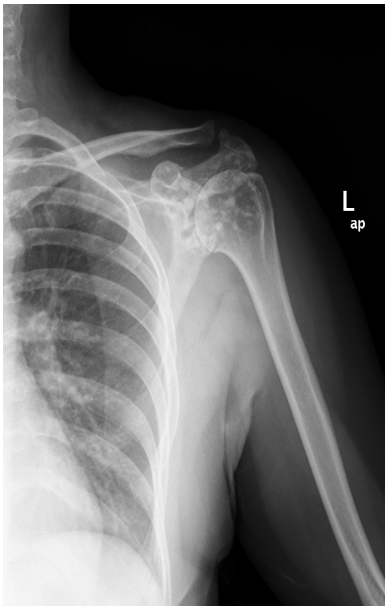

Figure 1: Radiography of the left shoulder blade of 32-year-old female patient with radiopaque changes affecting the acromion bone and head of the left humerus.

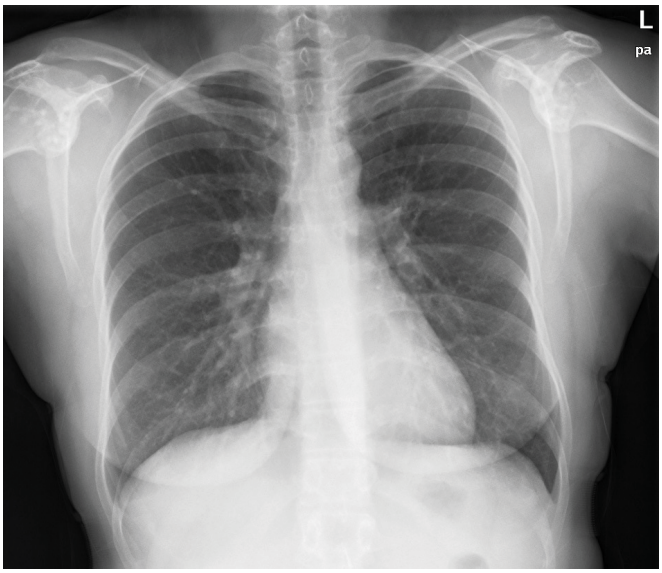

Figure 2: Chest radiograph of 32-year-old female patient with radiopaque changes affecting the joint regions at the level of the humerus.

***Address for Correspondence:** Diogo André, Department of Internal Medicine, Hospital Central do Funchal, Madeira Island, Portugal; E-mail: diogomig91@gmail.com; teresaandre@gmail.com*

Received 25 January 2021; **Accepted** 04 February 2021; **Published** 10 February 2021

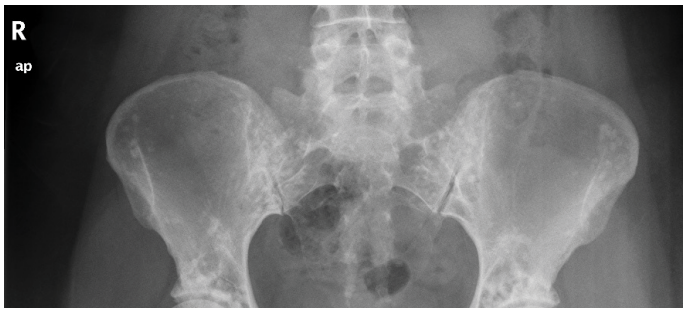

Figure 3: Pelvic radiograph of 32-year-old female patient with radiopaque changes affecting the joint regions at the level of the femurs and pelvic girdle.

relationship has not been demonstrated [1-3]. There isn't a standard treatment scheme, usually non-steroidal anti-inflammatory drugs and opioids suffice to mitigate the pain [4].

Conclusion

Despite its benign nature, its recognition and diagnosis are vital due to the impact in patient's prognosis. This case highlights the existence of this entity as a differential diagnosis in patients with suggestive radiographic alterations. Symptomatic patients should receive conservative treatment and undergo long-term follow-up, instead of subjecting them to invasive complementary diagnostic procedures.

References

1. Lagier, R, A Mbakop and A Bigler. "Osteopoikilosis: A radiological and Pathological Study." *Skeletal Radiol* 11(1984): 161-168.

2. Carvalho, Antonio Carlos Pires, Rodrigo Santos Beze and Sérgio Estevam Picinini. "Osteopoiquilose: Apresentação de um caso E Revisão da Literatura." *Radiologia Brasileira* 35(2002): 191-192.

3. Cravo AR and Villacreses C. "Osteopoiquilose: Dois Casos Clínicos". *Acta Reum Port* 31(2006): 255-260.

4. Mahbouba, Jgirim, Golli Mondher, Mhenni Amira and Manari Walid, et al. "Osteopoikilosis: A Rare Cause of Bone Pain." *Caspian J Int Med* 6(2015): 177.

How to cite this article: André, Diogo, Fabiana Gouveia, Helena Luís and João Gaspar, et al. "Disseminated Condensing Osteopathy." J Mol Genet Med 15(2021): 475