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Hiperostosis esquelética idiopática difusa: Aspectos clínicos y mecanismos patogénicos

Diffuse idiopathic skeletal hyperostosis: clinical features and pathogenic mechanisms

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The article "Clinical-radiological characteristics of diffuse idiopathic skeletal hyperostosis in two medical centres in Cali, Colombia: report of 24 cases" [1] reminds us of a frequent pathology among our elderly patients – to avoid using the expression "third age" – which is not broadly disseminated but usually leads to bone pain and may also injure nerve structures (neuropathic pain), disrupting the patient's quality of life and aggravating the functional limitation. Researchers Quintero, González, Arbeláez, Cortes and Rueda, developed two questionnaires: mHAQ and BASFI intended to study the condition.

Allow me to review some of the aspects discussed in this excellent report:

1. Study design: I would like to highlight the design used by the authors in conducting a descriptive, retrospective study of a cohort of patients with a diagnosis of D.I.S.H., analysed over 18 years, based on a review of the records of two referral centres and using the Resnick-Niwayama [2] clinical and radiological criteria; patients were admitted to the trial only if they met these criteria. Subsequently, the researchers asked patients over the phone to complete 2 questionnaires - m H.A.Q and BASFI – to assess the level of difficulty in performing their everyday activities and define the level of limitation.
2. Relevance: In this 21st Century, we physicians forget the past and overlook the importance of those who created and generated the information; this information enables us to make the right diagnoses and choose the therapy so that our patients enjoy a healthier life.
3. Background: the authors reviewed the original article by Professors J. Forestier (French) and J. Rotes (Spaniard) [3], who in 1950 described the disease under the name "Senile Ankylosing Hyperostosis of the Spine", published in the *Annals of Rheumatic Diseases*. D. Resnick and Niwayama, described the radiological and pathological criteria in 1976. Hirasawa et al. [4], then identified the prevalence and the radiological measures based on the simple radiological findings by Resnick, while the Japanese used CT. Julkunen et all. [5] in 1975 reported the epidemiology of the disease, while Kim et al. [6] in 2004, reported its prevalence in Korea. Moreover, Milner et al. [7], reported the mortality in women.
4. Association with other pathologies: the disease has been said to be associated with Paget's disease of bone and among its complication it may lead to oropharyngeal dysphagia and vertebral fractures
5. Publications in Colombia: In 2000, Medina, Restrepo, Calvo and Iglesias [7], published in the Colombian Journal of Rheumatology an article on the association between spondylitis and DISH. This is an interesting association, though very difficult to differentiate. Masterfully, the authors using the images referred to in Figure 1, show the ossification of the anterior longitudinal ligament; Figure 1B, in addition to describing the ossification of the ligament, clearly depicts the preservation of the intervertebral spaces.

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Usually the facet joints are not compromised and the spinal apophyses are not affected. The sacroiliac joints are intact, as shown in Figure 1. A description about synostosis is discussed and one of the contributions of the article – in addition to the above-mentioned information – are the excellent images that clearly depict the characteristic pathological findings of DISH at the level of the spine, the knees, the pelvis, and enthesopathy. Another relevant information is the fact that DISH is more frequent in males and is commonly associated with diabetes and obesity, as observed in two groups. Females apparently present a more severe phenotype of the disease, which starts at an earlier age.

6. Strengths of the study: Notwithstanding the small number of cases (24 patients), the authors make a comprehensive analysis of the disease. The primary reason why patients seek care is pain and so they are referred to the rheumatologist. For this reason, the researchers were able to analyze this sample of our population in Cali, with findings that are consistent to what is reported in the literature. The pathological mechanisms leading to bone formation in DISH are clearly identified with regards to angiogenesis, bone growth factors and atherosclerosis. Finally, with regards to therapy, the researchers followed the recommendations published in the medical literature.

I want to congratulate the researchers for raising our awareness about the fact that DISH does exist, will continue to exist, and its prevalence will be increasingly frequent as a consequence of population aging.

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