

14. ARTRITIS ASOCIADA A LA FLUOROSIS

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Resumen

La artritis asociada a la fluorosis se considera la primera manifestación clínica de la fluorosis ósea. Las primeras dos fases de la fluorosis del esqueleto suelen no diagnosticarse adecuadamente porque los síntomas que refieren los pacientes imitan los de la artritis. Existe muy poca investigación para determinar su incidencia y el tema está ausente en libros de referencia al tratar los efectos del flúor. Es muy probable, que aun en áreas de fluorosis endémica, la consulta por espondilitis inhabilitante u otras afecciones articulares, hayan sido rotuladas como artritis crónicas.

Palabras clave: artritis, fluorosis esquelética.

ARTHRITIC PAINS AND FLUORIDE ACCUMULATION

Summary

Arthritis is considered the first clinical manifestation of bone fluorosis. The first two phases of skeletal fluorosis may pass undiscovered because the symptoms referred by patients are similar to the arthritis. The incidence of the symptom is not known and the point is absent in reference books when dealing with the effects of fluoride. It is deemed highly likely that in areas of endemic fluorosis crippling articular defects may have been labelled as "chronic arthritis".

Key words: arthritis, skeletal fluorosis

Artritis asociada a la fluorosis.

Primeras etapas de fluorosis esquelética.

Las primeras dos fases de la fluorosis del esqueleto suelen no diagnosticarse adecuadamente porque los síntomas que refieren los pacientes imitan los de la artritis. Existe muy poca investigación para determinar su incidencia y el tema está ausente en libros de referencia al tratar los efectos del flúor.¹ Kilborn y col.² informan que en EUA han sido publicados sólo unos pocos casos y consideran como muy probable que –aun en áreas de fluorosis endémica– las consultas por espondilitis inhabilitante u otras afecciones articulares hayan sido rotuladas como artritis crónicas.

El examen de los dramáticos informes provenientes del sudoeste de China, la India o Africa, llamando la atención sobre casos avanzados, pueden ayudar al diagnóstico de los casos benignos. Singh y col.³ describen dolores no intensos en las pequeñas articulaciones de manos y pies, rodillas y columna. En las zonas de fluorosis endémica, los dolores suelen recibir el diagnóstico de reumatoideos u osteoartríticos. Estos síntomas ocurren antes de la aparición de claros signos radiológicos.

En el informe Fluorides and Human Health se destaca que la fluorosis dental (moteado del esmalte) es fácilmente reconocible, pero la fluorosis esquelética no suele ser clínicamente discernible hasta que se transforma en inhabilitante.⁴ En las etapas avanzadas se observa cifosis y envaramiento de la columna, con limitación del movimiento. La dificultad en la ambulación tiene un componente articular y otro neurológico.

Con el objeto de transmitir al lector el impacto producido por las descripciones de los investigadores, hemos preferido transcribirlas textualmente Según Franke y col.⁵ *"in the initial stages [of skeletal fluorosis], the complaints of the patients are not remarkable. At first they experience vague rheumatic pains, then the pains become localized in the spine, especially in the lumbosacral region. Later, a sensation of stiffness in the lumbar and cervical spine develop. However, we also found patients with slight radiological changes (subtle signs or stage 0-I) who complained of intense pains in the spine and in the large joints. On the other hand, some patients whose fluorosis was radiologically distinct were almost without complaints".*

Teotia y col.⁶ por su parte, expresan: *"In early stages, fluorosis is usually associated only with stiffness, backache, and joint pains which may suggest the diagnosis of rheumatism, rheumatoid arthritis, ankylosing spondylitis and osteomalacia. At this stage the radiological findings of skeletal fluorosis may not be evident and therefore most of these cases are either misdiagnosed for other kinds of*

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arthritis or the patients are treated symptomatically for pains of undetermined diagnosis. The majority of our patients had received treatment for rheumatoid arthritis and ankylosing spondylitis before they came under our observation”.

Czerwinski y Lankosz ⁷ informan: “In our material we noted degenerative changes in the lumbar spine in 95% of cases, which suggests that fluoride accelerates these changes. In addition to pain in the lower spine which is associated with radiological changes, patients with negative x-ray findings also complain of pain in the lumbar-sacral area, an indication that symptoms precede changes demonstrable by x-ray”.

Waldbott y col.⁸ dicen: “During litigation of this case, muscular pains, general fatigue, and arthritis in conjunction with liver and kidney damage and with hypothyroidism were recorded. The court decision found a definite relationship between the disease and fluoride ingested from food grown in the contaminated area”. Y los mismos autores,⁹ en 1978: “Extensive research from India has revealed severe arthritic changes and crippling neurological complications even where the fluoride concentration in water naturally is as low as 1.5 ppm. Even though extensive bone deformities may not be found on a large scale from fluoride in water at the 1 ppm concentration, some of the early signs of the disease, such as calcifications of ligaments, joint capsules, and muscle attachments, are likely to occur. Indeed these conditions are characteristic of osteoarthritis, in which the formation of microcrystals of apatite (known to be promoted by fluoride) has now been clearly demonstrated. Among the elderly, arthritis of the spine is an especially common ailment that is customarily attributed to ‘aging.’ Since fluoride retention in bones increases as a person grows older, how can we disregard the possibility that this ‘old age’ disease might be linked with fluoride intake? For example, Pinet and Pinet described in detail X-ray changes encountered in skeletal fluorosis in North Africa that are in every respect identical with those present in the arthritic spine of the elderly elsewhere”.

Carnow y Conibear¹⁰ expresan: “Our findings demonstrate a highly significant relationship between the frequency of back and neck surgery, fractures, symptoms of musculoskeletal disease and a past history of diseases of the bones and joints. In the absence of so-called classic fluorosis, a disease complex was established which

involves much more than merely the radiologic appearance of dense bone (...) Similar findings of musculoskeletal changes without classic x-ray signs of fluorosis in workers exposed to high levels of fluorides have appeared in a number of other studies. Of special importance is the large prospective study by Zislin and Girskaia (1971). They followed 2,738 workers from the time they first came to work in an aluminum smelter and compared them with 1,700 others employed in a nonfluoride producing industry. They found that nonspecific bone changes, musculoskeletal symptoms and other findings antedate the classic x-ray changes of fluorosis in the bones by five to seven years and concluded that the changes of fluorosis described by Roholm represent the late stage of the disease”.

Smith ¹¹ dice: “Early bone fluorosis is not clinically obvious; often the only complaints of young adults are vague pains in the small joints of the hands, feet, and lower back. Such cases may be misdiagnosed as rheumatoid arthritis or ankylosing spondylitis”.

Según Zhiliang y col.,¹² “According to our survey, clinical manifestations of fluoride injury were systemic. A wide variety of vague, subtle symptoms (i.e. backache, restricted joint movement, abdominal pain) occurred either prior to or simultaneously with the development of bone changes similar to those reported previously. Nonskeletal symptoms, therefore, are important for early diagnosis”.

Czerwinski y col.¹³ agregan: “Assessment of the fluoride-induced changes from x-ray results is often difficult, especially in the initial stages commonly encountered... Analysis of workers’ complaints showed no specific pain or other symptom that we could refer only to fluorosis... The only characteristic feature would be multiple-joint involvement in the case of fluorosis. This would differentiate fluorosis from monoarticular osteoarthritis (OA), but unfortunately not from multiple-joint osteoarthritis or rheumatoid arthritis (RA)”.

Como apreciará el lector después de la lectura de las transcripciones anteriores, el diagnóstico correcto de los muy frecuentes problemas articulares exige el conocimiento del metabolismo del flúor. En la literatura hay informes de casos aislados de pacientes con artritis, cuyos síntomas se aliviaron al abandonar el hábito.

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