Acitretin-Related Ossification

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A 48-year-old woman was referred to our rheumatology outpatient clinic because of low back pain and stiffness. Her complaint had been present for a number of years but had increased in intensity. The pain worsened during the day, indicating a noninflammatory origin. Neurological examination had revealed no abnormalities. Physical therapy was beneficial. Recently, the family physician had prescribed celecoxib, which resulted in alleviation of the pain. She did not complain about other joints.

The patient had autosomal recessive lamellar congenital ichthyosis. Until the introduction of therapy with retinoids, no effective treatment was available. Since then, she had been treated for 10 years with etretinate and acitretin, respectively, until she developed symptoms fitting the diagnosis of benign intracranial hypertension. Four years later, therapy with acitretin was reinstituted in a lower dosage because of progressive skin abnormalities and the disappearance of the symptoms of the intracranial hypertension. Intracranial hypertension did not recur. In total, she had been taking retinoids for 23 years.

Examination revealed paravertebral tenderness, a decreased lumbar functional index of 3 cm, and moderate hyperkeratosis of the palms and soles, with xerosis cutis, alopecia, and plate-like, thin, white to brown scales on the lower extremities, neck region, and flanks due to the lamellar ichthyosis.

Laboratory examination was normal. Radiographs of the lumbar spine and pelvis showed ossification of the iliolumbar ligaments on both sides (Figure 1). Three years earlier, a radiograph of the lumbar spine and pelvis was judged to be normal. In retrospect, however, beginning ossification can be detected on this radiograph as well (Figure 2).

It was concluded that the patient had acitretin-induced ossifications. The delicate balance between beneficial and unfavorable effects of this treatment was tipped in favor of continuation of the acitretin therapy (although in lower dosage) because of the lack of other effective treatment modalities for congenital ichthyosis and the positive results of celecoxib on the back pain.

Acitretin is the treatment of choice in patients with disorders of keratinization such as congenital ichthyosis. Known side effects include stomatitis, cheilitis, thinning of non-

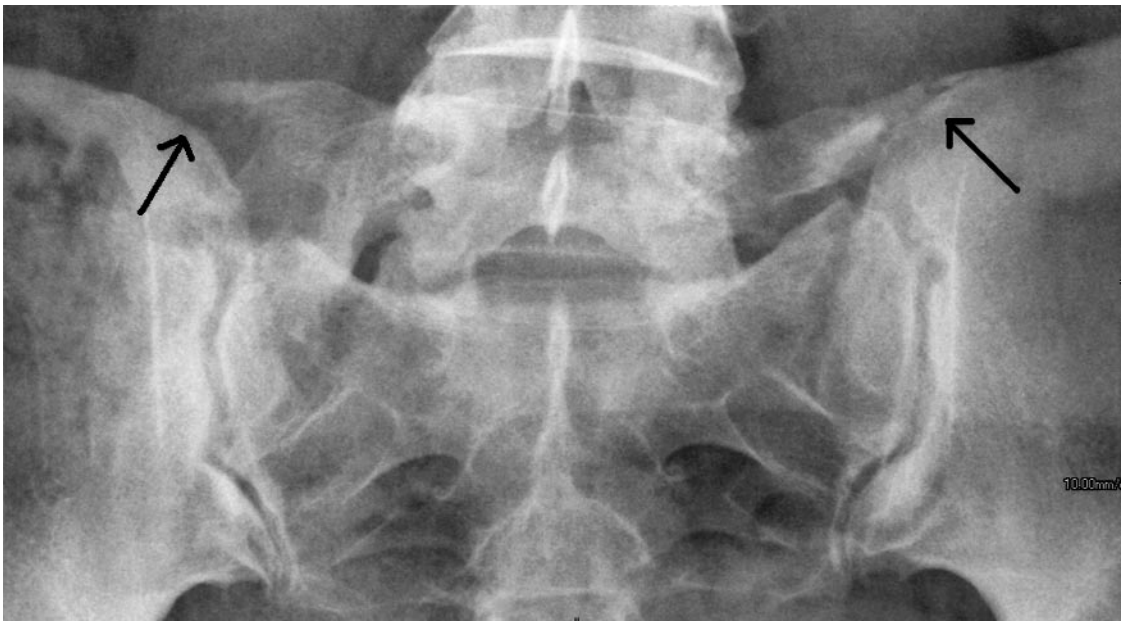

Figure 1. Radiograph of the pelvis (2006) showing remarkable ossification of both iliolumbar ligaments.

Figure 2. Radiograph of the pelvis (2003) showing a right-side lumbosacral transition anomaly. Normal sacroilial joints.

involved skin, hypertriglyceridemia, hepatitis, and nausea. Longterm treatment is associated with benign intracranial hypertension and spinal hyperostosis, and soft tissue calcifications as seen in this patient[1-3].

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