

### Coccygodynia as a possible presenting symptom of psoriatic arthritis

Sirs,

Coccygodynia (or coccydynia) (Cog) is a term that indicate pain in and around the region of the coccyx (1). It mainly affects adult females (male/female ratio 1:5) (2) and is often caused by pathologic instability of coccyx due to trauma (2, 3). Furthermore, it is more common in obese subjects (2, 3). Childbirth is another possible causative factor (4), but frequently the etiology remains obscure (idiopathic cases) or can be attributed to other diseases involving the coccyx or the neighbouring tissues and organs.

A 52-year-old, non-obese, Caucasian man presented in April 2010 with a 3-month history of Cog. Decreased sitting and seat cushioning were ineffective. Administration of non-steroidal anti-inflammatory (NSAIDs) was only partially effective. Injuries on the coccyx were excluded. Moreover, the patient reported, from March 2010, the onset of pain and swelling involving both the ankles, the second and third metatarsophalangeal joints of the right foot, and the third finger of the right hand. The patient's medical history was unremarkable except for a mild form of psoriasis localised in scalp and auricles. Sacro-coccygeal radiographs and echotomography of abdomen ad pelvis and colonoscopy were negative.

On admission to our Department, physical examination confirmed arthritis of the ankles and right foot. The third finger of the right hand showed a typical dactylitis. Cog persisted. Lumbo-sacral range of motion and neurologic examination were normal. Extensive blood tests showed only a slight increase of ESR (28 mm/hr) and CRP (1.6 mg/dl – normal values <0.5).

A diagnosis of psoriatic arthritis (PsA) was made. Since the patient refused therapy with

disease modifying anti-rheumatic drugs (DMARDs), prednisone was administered at the dose of 25 mg/daily for a week and progressively tapered and then stopped after two months. Remission of arthritis and Cog was obtained in 14 days, while dactylitis required 2 local injections of corticosteroids. Twenty-six days after treatment was interrupted, a mild ankle arthritis reappeared and after 3 more days, Cog also reappeared. The patient refused an MRI examination of the coccyx and continued to refuse the administration of DMARDs. He preferred the intake of 6.25 mg/daily of prednisone, obtaining a new complete remission of all rheumatic signs and symptoms in 16 days. PsA belongs to the spondyloarthritis (SpA) complex. It can involve the peripheral joints but also the spine and the sacroiliac joints (5). Enthesitis is a distinctive pathological feature of SpA (6). The anterior coccyx is the point of insertion of the muscle levator ani while the gluteus maximus inserts on posterior coccyx. Furthermore, several ligaments originate from the coccyx. As a consequence, it represents a possible site of enthesitis. In addition, the sacrococcygeal joint and intracoccygeal joints present fibrocartilaginous discs as in other spine tracts commonly involved by the spondylitic lesions of SpA.

At the best of our knowledge, enthesitis or SpA disco-vertebral damages of the coccyx have never been reported, but idiopathic cases of Cog are frequent. Bone oedema at MRI examination has been described in cases of Cog (2) and, although it is a non-specific sign, it has also been reported in patients with SpA enthesitis or axial involvement (7-9). Our patient refused MRI examination and, due to its short course, PsA could not have caused coccyx lesions detectable by radiographs. Nevertheless, the case history of this subject is highly suggestive for a link between PsA and Cog.

In our opinion, idiopathic cases of Cog

deserve to be analysed in the future, not only by the orthopaedic specialist but also by the rheumatologist in order to confirm a possible association with PsA or other SpA and to demonstrate that also the coccyx can be involved by SpA in the same way as cervical, thoracic and lumbar tracts of the spine.

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