Enhanced Healing of Sacral and Pubic Insufficiency Fractures by Teriparatide

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J Rheumatol 2012;39;1306-1307
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*The Journal of Rheumatology* is a monthly international serial edited by Earl D. Silverman featuring research articles on clinical subjects from scientists working in rheumatology and related fields.
To the Editor:

We describe healing of enhanced insufficiency fracture of combined pubic rami and sacrum by daily teriparatide (1-34 PTH) injection.

A 73-year-old woman was admitted because of acute low back and groin pain. She denied any trauma history. Plain radiographs revealed fracture of the left superior ramus (Figure 1A). Because of the disproportionate pain and lack of response to analgesics with bed rest for 2 weeks, a bone scan was arranged and showed sacral and 4 rami fractures (Figure 1B). Daily teriparatide injection was initiated with calcium 1000 mg/day and vitamin D 400 IU/day supplements for osteoporosis. At 3 months' followup, the pain had subsided completely, with abundant callus formation on rami fractures (Figure 1C). The fractures showed good consolidation at the end of 18 months (Figure 1D).

Sacral combined with rami insufficiency fractures usually occur in osteoporotic bone and are often underdiagnosed. Management includes bed rest, analgesic, and gradual mobilization. Owing to its relationship to osteoporosis, additional medications for enhancing bone strength and preventing further fractures are mandatory.

There are many reports about the fracture-healing potential of teriparatide and its analog for femoral neck and pubic insufficiency fractures. Our experience may expand the applications of anabolic agents for osteoporosis.
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J Rheumatol 2012;39;6; doi:10.3899/jrheum.111458

Figure 1. C. Abundant callus formation after teriparatide for 3 months. D. Complete union and remodeling of pubic rami fractures at 18 months’ followup.