

# How to prevent glucocorticoid-induced osteoporosis

(AUGUST 2010)

**TO THE EDITOR:** We read with great interest the excellent review by Dore<sup>1</sup> on the prevention of glucocorticoid-induced osteoporosis. As indicated by the author, bone loss is one of the most serious complications of corticosteroid therapy, causing significant costs, morbidity, and mortality related to vertebral and hip fractures. Therefore, prevention of bone loss is mandatory, and several drugs are available.

However, the author does not mention strontium ranelate in the armamentarium for this preventive treatment. Strontium ranelate is an orally administered treatment of postmenopausal osteoporosis, reducing the risk of vertebral and hip fractures, and its efficacy has been demonstrated in clinical and histologic studies.<sup>2,3</sup> It has a particular mode of action, since it simultaneously inhibits bone resorption and stimulates bone formation.<sup>2,3</sup> Only minor adverse effects have been reported, including gastrointestinal signs such as nausea and diarrhea (only during the first 3 months), headache, and skin lesions. Strontium ranelate is currently licensed for the treatment of postmenopausal osteoporosis, but it appears to be an effective solution for diverse fracture risks, including the treatment of glucocorticoid-induced osteoporosis.

In a 2-year observational, controlled study that included 107 patients with glucocorticoid-induced osteoporosis treated with strontium ranelate or risedronate, there was a significantly higher increase in lumbar spine and total hip bone mineral density and a stronger reduction in back pain in the group of patients treated with strontium ranelate than in the group of patients under risedronate therapy, but the number of patients with no new fractures was similar in both treatment groups.<sup>4</sup>

In an animal model, strontium ranelate was significantly superior to alendronate in the prevention of glucocorticoid-induced osteopenia according to bone mineral density and histomorphometric analysis.<sup>5</sup>

Therefore, we consider that strontium ranelate could also be effective in glucocorticoid-induced osteopenia prevention, but prospective studies are required.

CLAUDE BACHMEYER, MD  
Service de Médecine Interne  
CHU Tenon (AP-HP)  
Paris, France

MARION GAUTHIER, MD  
Service de Médecine Interne  
CHU Tenon (AP-HP)  
Paris, France

## REFERENCES

1. Dore RK. How to prevent glucocorticoid-induced osteoporosis. *Cleve Clin J Med* 2010; 77:529–536.
2. Ringe JD. Strontium ranelate: an effective solution for diverse fracture risks. *Osteoporos Int* 2010; 21 (suppl 2):S431–436.
3. Hamdy NA. Strontium ranelate improves bone microarchitecture in osteoporosis. *Rheumatology (Oxford)* 2009; 48:iv9–13.
4. Ringe J, Dorst A, Farahmand P. Treatment of glucocorticoid-induced osteoporosis with strontium ranelate: a 2-year observational, controlled study versus risedronate (abstract). *Osteoporos Int* 2009; 20(suppl 1):S72.
5. Sun P, Cai DH, Li QN, et al. Effects of alendronate and strontium ranelate on cancellous and cortical bone mass in glucocorticoid-treated adult rats. *Calcif Tissue Int* 2010; 86:495–501.

doi:10.3949/ccjm.77c.10002

**IN REPLY:** I thank Drs. Bachmeyer and Gauthier for their kind comments. My review was limited to therapies currently available by prescription in the United States; therefore, strontium ranelate was not included. I agree with their comment that prospective studies are required to consider strontium ranelate as an effective therapy for glucocorticoid-induced osteoporosis.

ROBIN K. DORE, MD  
Division of Rheumatology, David  
Geffen School of Medicine at UCLA  
Tustin, CA

doi:10.3949/ccjm.77c.10003

CONTINUED ON PAGE 765

## Electronic medical records

(JULY 2010)

**TO THE EDITOR:** Like Dr. Hanlon (Cleve Clin J Med 2010; 77:408–411), I too am alarmed by the inability of electronic medical records to incorporate whole language. Physicians can make treatment errors when they fail to include contextual factors in their diagnosis and treatment plans. The social and circumstantial complexities of a patient's life cannot be parsed by computer systems that can only “search” bullet points. The current template-driven systems were originally designed for billing and now are touted for “quality measurements.” They could tell us whether a patient's hemoglobin A<sub>1c</sub> was at goal, or if she was “noncompliant” and hadn't filled a prescription; they could not tell us that a psychologically abusive husband would not allow her to purchase her diabetes medications (this actually happened to one of my patients). I would argue that addressing the abuse is more important to her health. Yet we are all being pushed, like teachers teaching to a standardized test, to hit certain “benchmarks,” in order to be called “quality” physicians.

Since it is unlikely that the tide will turn back to a written record, physicians should be demanding rapid deployment of computer systems, now in development, that can analyze whole language and find information in context. This technology is out there and needs aggressive support.

Texting contractions, Twitter, and the rest are chipping away at the concept of narrative. Our patients' lives are worthy of a narrative, not the bullet points and cut-and-paste we are forcing their lives and health into.

EMILY A. NOLFO, MD  
Branford, CT

doi:10.3949/ccjm.77c.10001