

BARRETT'S ESOPHAGUS AND OSTEOPENIA. REPORT OF A CASE

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OBJECTIVES

Barrett's esophagus is metaplasia in the cells of the lower end of the esophagus. It is characterized by the replacement of the normal stratified squamous epithelium lining of the esophagus by simple columnar epithelium with goblet cells. The disease is often related to gastroesophageal reflux and patients have pain necessitating chronic usage of proton pump inhibitors. Proton pump inhibitors have been associated with the development of low bone mineral density. The aim was to describe the case of a patient with Barrett's esophagus and chronic proton pump inhibitor usage who developed osteopenia.

METHODS

A male patient aged 67 presented with diffuse musculoskeletal pain. He had a 10-year history of Barrett's esophagus. He was being followed for Barrett's esophagus and had been taking proton pump inhibitors for the treatment of pain. Laboratory investigations performed revealed 25(OH)D₃ 33 ng/ml (normal values >30 ng/ml). Radiology of the spine revealed osteopenic vertebrae.

RESULTS

Bone mineral density was measured and revealed a T score of -2.3. The patient had normal testosterone levels and a negative family history of osteoporosis. Vitamin D and calcium orally were administered.

CONCLUSIONS

The administration of proton pump inhibitors appears to be associated with low bone mineral density and an increased fracture risk (Fournier et al 2009, Fraser et al 2013). In patients with chronic, albeit benign, gastrointestinal disorders, care should be taken that treatment with proton pump inhibitors be limited to the needs of the patients, thus preventing a skeletal side effect, such as osteoporosis.

References

- Fournier et al. Proton pump inhibitors, osteoporosis, and osteoporosis related fractures. *Maturitas* 2009; 64: 9-13.
Fraser et al. The effect of proton pump inhibitors on fracture risk: report from the Canadian Multicenter Osteoporosis Study. *Osteoporos Int* 2013; 24: 1161-8.