

[51–81 and 56.07±9.72 [40–76] in the control group. The mean bone mineral density (BMD) in vertebral site was 0.856±0.090g/cm² and 1.216±0.185g/cm² in control group. In femoral site, it was 0.877±0.221g/cm² and 1.061±0.142g/cm² respectively. The mean T-score in vertebral site was -2.387±0.814 DS in osteoporosis/osteopenia group and 0.643±1.587 DS in control group. In femoral site, it was -1.577±0.970 DS and 0.213±1.162 respectively. The oral examination showed an excessive tooth mobility in 60% and 36.7% of controls without a significant difference, a gingival recession in 50% and 30% of controls, the presence of periodontal pockets in 23.3% and 16.7% of controls without a significant difference, a plaque index ≥2 in 53.3% of osteoporosis/osteopenia patients and 63.3% of controls and a non rectilinear trajectory of mouth opening in 13.3% and 3.3% of controls.

Conclusions: Our study showed that patients with osteoporosis or osteopenia have a poor oral hygiene, but without significant difference with control group. However, patients who were diagnosed as osteoporosis must pay more attention to their periodontal health. Good oral hygiene maintenance might be a crucial factor for preventing the deterioration of osteoporosis progressing.

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AB0850 HELICOBACTER PYLORI INFECTION AND OSTEOPOROSIS IN POST MENOPAUSAL WOMEN

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Background: Osteoporosis is a health problem that if is left untreated, can lead to serious health & economical complications. It is also very common in postmenopausal women. Mineral deficiency, smoking, low BMI, some certain diseases and some medications can also cause osteoporosis. H. Pylori infection can also increase levels of inflammatory cytokines and bone turn over regulatory cytokines, as a result, it is likely that H. pylori infected patients are at increased risk for osteoporosis.

Objectives: the present study was done to understanding the association between H. Pylori seropositivity and osteoporosis in postmenopausal women.

Methods: The study population consisted of 34 osteoporotic patients and 73 healthy controls. Serum levels of h.pylori antibody (IgA, IgG) were measured by ELISA method.

Results: There was no difference in levels of IgA and IgG h.pylori antibody between patients and healthy controls

IgA seropositivity was 70.6% in osteoporotic women and 54.8% in healthy women (p value: 0.1). Also H. pylori IgG seropositivity was 82% in osteoporotic women and 75.3% in healthy women (p value: 0.4). We did not find any correlation between H. pylori seropositivity and bone mineral density in post menopausal women.

Conclusions: In this study, we found that Helicobacter pylori infection does not increase the osteoporotic chance and is not a reliable risk factor for osteoporosis. greater sample size, gastric biopsy to detect atrophic gastritis, bone turn over factors and Cag detection is recommended in order to achieve more accurate results

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AB0851 ZOLEDRONATE AUDIT – ARE WE MEETING EUROPEAN GUIDELINES?

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Background: Zoledronate is recommended by European guidelines for the treatment of osteoporosis particularly where first-line oral drugs are ineffective

or contraindicated. EULAR's guidelines are complimented by UK organisations including the National Institute of Health and Care Excellence (NICE), National Osteoporosis Guidelines Group (NOGG), British Society of Rheumatology (BSR) and the National Osteoporosis Society (NOS).

Objectives: The aim of our audit was to ascertain whether our use of zoledronate was compliant with current guidelines and review the real life experience.

Methods: We performed a retrospective audit of fifty patients who were commenced on zoledronate for the treatment of osteoporosis during 2012–2016 in our Trust. Data gathered included the reasons for commencement, whether patients had appropriate monitoring and the effect it had on DEXA and FRAX scores.

Results: The age ranged from 44–88 years; 67% were between 60–80 years with 80% females. Vertebral fragility fractures were the most common type of fracture (42%). Zoledronate was commenced primarily because of either intolerance or inefficacy to oral anti-osteoporotic treatment (Table 1). It was commenced as first line in 20% because of contraindications to oral drugs. Almost 70% of our patients received zoledronate for two or three years. There was an improvement by 43% and 38% in the DEXA t-score for the spine and hip respectively. Stable t-scores were recorded for the spine and hip in 49% and 54% respectively, whereas 8% deteriorated. Three patients sustained a fragility fracture and a further 11 experienced side effects (Table 2); five patients consequently stopped treatment. Only 3% had recorded FRAX scores pre- or post-zoledronate treatment. All of our patients had their calcium and renal function measured before each zoledronate infusion whilst over 80% had their vitamin D checked. All of our patients had dental checks prior to treatment. Following post-treatment DEXA scans 46% continued zoledronate and 16% were on a drug-free holiday. A third were switched to denosumab due to ineffectiveness, side effects or contraindications.

Table 1. Rationale for Zoledronate Commencement

Rationale	Number	%
Intolerance	24	38%
GI Contraindication	11	17%
Inefficacy	24	38%
Other Contraindication	4	7%

Table 2. Side Effects of Zoledronate

Side Effect	Number	%
Bony Pain	1	9%
Flu-Like Symptoms	5	46%
Aches	1	9%
Acid-Reflux	1	9%
Rash	1	9%
Other	2	18%

Conclusions: The majority of our patients had improvements or stability in bone mineral density T-scores with only 20% experiencing side effects. Our results show that the vast majority of our patients are treated with zoledronate in concordance with guidelines. Nonetheless we can make improvements in recording FRAX scores and monitoring vitamin D levels. This has been highlighted to the multidisciplinary osteoporosis team and changes have been instigated. We plan to re-audit in due course.

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AB0852 INCREASED INFECTION RATE WITH CONCOMITANT RANK LIGAND INHIBITOR DENOSUMAB AND BIOLOGIC THERAPIES FOR RHEUMATIC DISEASES: REALITY OR ILLUSION? EXPERIENCE WITH 40 PATIENTS OVER 66 MONTHS AT THE UNIVERSITY OF SOUTHERN CALIFORNIA

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Background: Patients with autoimmune diseases are at increased risk of early onset osteoporosis due to multiple reasons including prolonged exposure to corticosteroids and the disease process itself in RA patients. Same patients are more likely to be on TNF inhibitors or other biologics, which causes them to be at an increased risk of infections. Denosumab, an anti-RANK ligand inhibitor, itself a biologic, used to treat osteoporosis, is associated with increased infection risk as Receptor activator of nuclear factor kappa B ligand (RANKL) is also expressed on activated T and B lymphocytes (1). It is unknown if there is an added risk of infections when TNF inhibitors/biologic agents and denosumab are used concomitantly.

Objectives: To determine if denosumab and biologics are associated with increased infection risk.

Methods: Data was collected and analyzed on 40 patients in the rheumatology clinic who had been on denosumab and TNF inhibitor/ other biologic for 66 months at the Keck Medical Center of USC.