patients treated with both BIOs and GCs (n = 10). We determined baseline (BL) characteristics, % changes in BMD in the lumbar spine (LS) and total hip (TH) from BL to 24 months, and % changes in serum bone turnover markers (BTMs), such as BAP, P1NP, NTX, and TRACP-5b, from BL to 6 months after dTP initiation. Dunnett's test was used for comparisons between B(−)G(−) and other groups.

Results: The mean ages of the B(−)G(−), B(+)(G−), B(−)G(+), and B(+)(G+) groups at BL were 70.0, 65.5, 69.6, and 71.5 years, whereas the mean duration of RA in these groups were 15.4, 20.8, 69.9, and 71.5 years, respectively. Furthermore, the mean baseline DAS28-CRP levels in these groups were 2.8, 2.2, 2.8, and 2.3. The mean LS-BMD (g/cm²) at BL were 0.795, 0.819, 0.826, and 0.853, respectively. The mean % changes in LS-BMD at 24 months were 15.5%, 12.7%, 11.9%, and 8.1%, respectively (Fig 1A). There were no significant differences between B(−)G(−) and other groups. The mean % changes in TH-BMD at 24 months in the B(−)G(−), B(+)(G−), B(−)G(+), and B(+)(G+) groups were 6.4%, 5.3%, 4.4%, and 13.5%, respectively (Fig 1B). A significant difference was observed between the B(−)G(−) and B(+)(G+) groups (p = 0.03). The % changes in BTMs in the B(−)G(−), B(+)(G−), B(−)G(+), and B(+)(G+) groups were as follows: BAP, 90.5%, 44.0%, 29.5%, and 87.7%; P1NP, 374.1%, 338.2%, 225.9%, and 640.0%; NTX, 75.2%, 106.6%, 42.5%, and 80.5%; and TRACP-5b, 75.8%, 43.85, 20.4%, and 87.7%; respectively. No significant differences were observed in the changes in BTMs among the groups.

Conclusion: This study suggested that concomitant use of BIOs and GCs inhibited the increase in BMD induced by dTP treatment in patients with RA, particularly TH-BMD. Although BTM analysis revealed no statistical significance, GCs might be associated with osteoporosis, and long-term use of these agents leads to fragility fractures in 30 to 50% of patients [1]. GCs are associated with several adverse effects. Glucocorticoid-induced osteoporosis (GIO), a bone metabolism disorder, accounts for 25% of the side effects associated with GC, and long-term use of these agents leads to fragility fractures in 30 to 50% of patients [1]. GCs are frequently used to treat rheumatoid arthritis (RA).

Methods: This retrospective, multicenter study included 683 patients (138 men, 545 women) with fracture risk factor scores ≥3 based on the new guidelines who were in the AORA registry. We examined patient characteristics, differences in patient backgrounds between treated and non-treated groups.

Results: There were no significant differences in mean GC dose between men and women (4.0 ± 2.3 mg/day vs 3.6 ± 1.8 mg/day, p = 0.08). The mean disease duration of RA in women was significantly longer than in men (180.2 ± 140.2 months vs 143.8 ± 129.6 months, p = 0.08). Untreated GIO patients were significantly more likely to be men and younger. The univariate analysis showed that clinic visits, male sex, younger age, and longer disease duration were significant risk factors for lack of therapeutic intervention for GIO. Multivariate analysis showed that being treated in a clinic, male sex, and younger age were significant risk factors for lack of therapeutic intervention for GIO.

Conclusion: Our results emphasize the importance of considering the prevention and treatment of GIO in all patients with RA, including younger and male patients, who have lower intervention rates.

References: