Use of glucagon-like peptide-1 receptor agonists and bone fractures: a meta-analysis of randomized clinical trials.

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Mots-clés	bone fracture [4], GLP-1RA [5], glucagon-like peptide-1 receptor agonist [6], meta-analysis [7]
Résumé en anglais	**BACKGROUND:** Patients with type 2 diabetes mellitus (T2DM) are at a higher risk of bone fractures independent of the use of antidiabetic medications. Furthermore, antidiabetic medications could directly affect bone metabolism. Recently, the use of dipeptidyl peptidase-4 inhibitors has been associated with a lower rate of bone fracture. The aim of the present meta-analysis was to assess whether patients with T2DM treated with glucagon-like peptide-1 receptor agonists (GLP-1Ra) present a lower incidence of bone fracture compared with patients using other antidiabetic drugs. **METHODS:** A search on Medline, Embase, and http://www.clinicaltrials.gov [8], as well as a manual search for randomized clinical trials of T2DM treated with either a GLP-1Ra or another antidiabetic drug for a duration of ≥24 weeks was conducted by two authors (GM, AM) independently. **RESULTS:** Although 28 eligible studies were identified, only seven trials reported the occurrence of at least a bone fracture in one arm of the trial. The total number of fractures was 19 (13 and six with GLP-1Ra and comparator, respectively). The pooled Mantel-Haenszel odds ratio for GLP-1Ra was 0.75 (95% confidence interval 0.28-2.02, P = 0.569) in trials versus other antidiabetic agents. **CONCLUSIONS:** Although preliminary, our study highlighted that the use of GLP-1Ra does not modify the risk of bone fracture in T2DM compared with the use of other antidiabetic medications.
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[1] http://okina.univ-angers.fr/guillaume.mabilleau/publications
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[3] http://okina.univ-angers.fr/daniel.chappard/publications
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[5] http://okina.univ-angers.fr/publications?f[keyword]=7468
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[7] http://okina.univ-angers.fr/publications?f[keyword]=7470
[8] http://www.clinicaltrials.gov
[9] http://okina.univ-angers.fr/publications/ua3449
[10] http://dx.doi.org/10.1111/1753-0407.12102
[11] http://www.ncbi.nlm.nih.gov/pubmed/24164867?dopt=Abstract