GI adverse events up with GLP-1 receptor agonists

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(HealthDay)—Glucagon-like peptide-1 (GLP-1) receptor agonists (RAs)

are associated with increased risk of gastrointestinal adverse events (AEs), with risk varying based on dose, background medications, and type of GLP-1 RA, according to research published online Nov. 9 in *Diabetes, Obesity and Metabolism*.

Karolin Bettge, from St. Josef Hospital in Bochum, Germany, and colleagues conducted a systematic literature review and selected 32 phase 3 clinical trials with GLP-1 RAs. They analyzed the proportion of patients reporting nausea, vomiting, or diarrhea for different doses and glucose-lowering background medications.

The researchers observed a dose-dependent risk for nausea for long-acting agents and across all GLP-1 RAs (P = 0.0063 and 0.0017, respectively); a similar trend was seen for vomiting (P = 0.23). There was a dose-dependent risk for diarrhea (P = 0.031). More nausea and vomiting were seen for background treatment with metformin (P = 0.04 and 0.0009, respectively). Less nausea and less diarrhea were seen for lixisenatide versus exenatide (twice/day). The risk was similar for dulaglutide and liraglutide, while less risk was seen for exenatide and albiglutide versus liraglutide. Compared with short-acting agents, long-acting GLP-1 RAs correlated with less nausea and vomiting but more diarrhea.

"GLP-1 RAs are associated with gastrointestinal AEs that are related to dose and background medications (especially metformin), and may vary in a compound-specific manner," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

More information: Full Text (subscription or payment may be required)