**Title: Impact of Type 2 Diabetes Mellitus (T2DM) and GLP-1 Receptor Agonists (GLP-1RAs) on Gastric Emptying During Endoscopic Procedures**

**Background:** Due to increased reports of aspiration risk with GLP-1RAs, our institution implemented a policy suspending GLP-1RA use 7 days prior to elective endoscopic procedures from January 1, 2024. Delayed gastric emptying may also be influenced by factors such as hyperglycaemia, obesity, and medications, which are more prevalent in patients with T2DM.

**Aim:**

1. To audit the incidence of retained gastric contents, procedural abandonment, and aspiration following 7-day GLP-1RA suspension.
2. To assess additional risk factors for delayed gastric emptying in the presence and absence of GLP-1RA use.

**Methods:** A retrospective audit of elective gastroscopies between January 1, 2021, and January 1, 2025, was performed. Inclusion: T2DM, age >18 years. Exclusion: unavailable procedure reports. Data collected included demographics, diabetes characteristics, GLP-1RA use, medications, comorbidities, and procedural outcomes.

**Results:** A total of 438 cases met inclusion. GLP-1RA use was noted in 47 cases (30 patients), with 14 interrupted ≥7 days pre-procedure. GLP-1RA users were predominantly female and had higher BMI. They also had more complex diabetes (higher concurrent insulin and SGLT2 inhibitor use). Documented retained gastric contents were more common in GLP-1RA users (12.7% vs. 0.07%), as was procedural abandonment (19% vs. 0.09%). No aspiration events were reported. Due to small numbers, statistical power was limited, and no clear impact of the 7-day suspension policy was observed.

**Discussion:** GLP-1RA use is associated with a higher risk of retained gastric contents, potentially impacting procedural outcomes. However, withholding GLP-1RAs for 7 days may not yield clinically meaningful benefit. Screening for additional risk factors for delayed gastric emptying remains essential during pre-procedural assessment.