**Health and Wellness Corner May 2026**

An update regarding GLP-1 drugs.

Glucagon-Like Peptide-1 Receptor Agonists or GLP-1 RAs are a relatively new class of medications used to treat type 2 diabetes mellitus (DM-II) and obesity (now with or without a diagnosis of DM-II). Some of the more familiar drugs are semaglutide (Ozempic, Wegovy, Rybelsus), dulaglutide (Trulicity), tirzepatide (Mounjaro, Zepbound), liraglutide (Victoza, Saxenda), and exenatide (Byette,Bydureon). These medications work by activating GLP-1 receptors throughout the body although primarily in the GI tract as well as the hypothalamic region of the brain.

One of the main effects of GLP-1 RAs is to modulate gastrointestinal tract motility. GLP-1 receptors are areas in which glucagon, a naturally occurring hormone that counterbalances insulin, binds causing a decrease in gastrointestinal motility. This in turns leads to the patient feeling full (or sated) and reduces the desire to eat. When the stomach becomes distended, the body naturally secretes glucagon. GLP-1 RAs act at the same receptor sites and has a longer bond to the sites therefore extending the effects of satiety and reducing gastrointestinal motility.

The brain also has GLP-1 receptors that signal satiety. GLP-1 RAs bind to these sites reducing the desire to eat. These two mechanisms are the main reasons for glucose modulation and reduced caloric intake. The reduced caloric intake leads to weight reduction. The satiety centers in the brain may also play a role in addictive behaviors and there is some preliminary evidence that GLP-1 RAs may quell those drives in some individuals.

Because of the effects of profound gastric emptying, timing of holding GLP-1 RAs is critical during times of planned surgeries that require anesthesia. Patients are usually counseled to hold these medications for up to a week prior to planned surgery in order to reduce any risk of aspirating stomach contents during the conduct of an anesthetic. The anesthesia care team are able to reduce the risk of aspiration by modifying some of their techniques both during induction and completion of an anesthetic.

GLP-1 RAs do have some side effects for individuals. Commonly these are feelings of nausea, bloating, and sometimes vomiting. These effects are more prevalent in the 'induction' phase of starting these medications and become less pronounced with time. However severe symptoms may necessitate discontinuing the medication. Another untoward effect of GLP-1 RAs is pancreatitis which is rare but can lead to serious complications including hospitalization.

One the other hand, another tremendous benefit to GLP-1 RA use is the reduction in Cardiovascular event risk including heart attack and stroke. IT has been noted in patient populations who are on these agents both for diabetes management as well as weight loss management independent of suffering from diabetes. Blood A1C levels are well controlled, and renal complications are also reduced in diabetic patients. GLP-1RAs may also help patients with polycystic ovary syndrome (PCOS) in reducing the symptoms of their disease.

GLP-1 RAs are an exciting new class of medications that we are just beginning to understand in the healthcare field but shows great promise in helping to manage some of the most devastating diseases associated with diabetes and obesity.