What are some anesthesia considerations regarding patients taking Semaglutide (Ozempic)?

The use of semaglutide and other glucagon-like peptide-1 (GLP-1) drugs have surged in popularity since their FDA approval in 2017.[[1]](#footnote-1) While initially approved as a drug to aid in the management of blood sugar levels when paired with lifestyle changes such as diet and exercise, it has since gained popularity as a weight loss drug amongst the general population.1,2 Semaglutide works by stimulating the release of insulin and in turn leads to delayed gastric emptying.2 This delayed gastric emptying leads to concerns for patient who are fasting in anticipation for a general anesthetic. These incidences have been observed with patient undergoing elective esophagogastroduodenoscopy.2 With the delayed gastric emptying that occurs with semaglutide/GLP-1 drugs comes the increased risk gastric regurgitation and aspiration during anesthesia.3

As these are relatively new drugs (GLP-1) that have quickly gained popularity in recent years there are differing opinions on how to manage patients taking semaglutide (GLP-1) while receiving a general anesthetic. For example the American Society of Anesthesiologist recommends that patients stop taking semaglutide (GLP-1) one day before receiving a general anesthetic for those taking daily injections. While those who are on a weekly dose should stop 1 week before.2 An editorial published in the Canadian Journal of Anesthesiology gave similar recommendations but differing lengths of cessation of the drug. The recommendation given in this editorial was to stop semaglutide 3 weeks prior to general anesthesia.3 It is important to be cognizant of those patients taking semaglutide for type 2 diabetes versus weight loss management, a joint decision should be made in consultation with their endocrinologist on risk/benefits of the cessation of the drug prior to anesthesia.3

The cessation of the injection/drug prior to anesthesia may not be feasible in every situation, in such cases it should be assumed that the patient has a full stomach and a rapid sequence induction should be considered.3,4 Increasing the fasting period for patients taking semaglutide remains controversial as their isn’t clear evidence on its safety nor how long would be required to ensure gastric emptying.3,4

Other important factors to consider:

* Patients undergoing a procedure with moderate/deep sedation are particularly at risk as they do not have a protected airway in the event of gastric regurgitation.2
* Patients taking higher doses of semaglutide for weight loss management versus those taking lower doses as typically seen in type 2 diabetes management are hypothesized to be at a higher risk of delayed gastric emptying.3
* Patients who have recently started taking semaglutide (GLP-1) are at a increased risk of gastric emptying as well as those experiencing gastrointestinal side effects from the drug such as nausea, vomiting, and abdominal distension.3
* An abdominal ultrasound can be used prior to anesthesia to verify the gastric contents.3,4

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1. [↑](#footnote-ref-1)