

Exploring the surge of Ozempic in Pakistan: Are we overlooking its oral health impact?

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Dear Madam, In recent years, Ozempic has garnered significant attention in Pakistan, reflecting its growing importance in discussions related to health and wellness within the country. It is a formulation of semaglutide, commonly used for the treatment of type 2 diabetes and obesity.¹ Belonging to the glucagon-like peptide-1 receptor agonists (GLP-1 RAs) class of drugs, it selectively binds and activates the GLP-1 receptors, which enhances insulin secretion, suppresses glucagon release, and appetite for a prolonged period, as compared to native incretin GLP-1. Consequently, this results in significant weight loss, as indicated by recent reports.³

While Ozempic is hailed as a “wonder drug” by many for weight management and type-2 diabetes, a closer look reveals emerging side effects that cannot be ignored. Apart from the well-established gastrointestinal and cardiovascular effects, the oral side effects of semaglutide have been noted most prominently, with the emergence of a new term, “Ozempic tongue,” or the formal condition known as dysgeusia - an alteration in taste perception where the individual experiences a bitter metallic taste or a reduced sensitivity to flavours⁴ Although the mechanism behind this phenomenon is still unclear, some reports concluded that semaglutide might alter the taste perception as GLP-1 Receptors may disrupt the taste pathways.⁴

Additionally, reports of xerostomia (dry mouth) have also been documented in some cases, potentially due to the mechanism of semaglutide causing gastrointestinal disturbances such as diarrhoea, leading to total body water loss.⁵ Reduced salivary flow can lead to halitosis (bad

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breath), speech difficulties, and make teeth more susceptible to dental caries as well as altering the natural biome of the oral cavity. Another potential adverse effect consider is acid regurgitation induced by semaglutide, which leads to frequent vomiting in some individuals, causing the dental enamel to erode. Enamel erosion can further lead to dentine sensitivity, discoloration, and increased incidence of dental caries.

In a country like Pakistan, where the use of self-prescribed medication is very high, especially for weight reduction purposes, the general population must have a copious amount of awareness regarding the use of Ozempic and its potential side effects, since early awareness can lead to early diagnosis and a better overall better treatment plan and outcome. Moreover, we think it is essential that more specific trials are conducted into the potential effects of semaglutide on oral health, and oral symptoms should be included oral symptoms in pharmacovigilance reporting to establish more comprehensive and robust guideline for its safe usage.

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