

Vonoprazan: Potentially new first-line treatment for delayed upper gastrointestinal bleeds following endoscopic procedures? A letter to the editor

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Madam, endoscopy nowadays is widely used as a diagnostic and therapeutic tool for various gastrointestinal diseases due to it being less invasive and safer. However, amongst some adverse events is delayed bleeding. The definition of delayed bleeding requires endoscopic haemostasis and/or blood transfusion after at least two days of treatment.¹

Oesophageal cancer is comparatively more common in Pakistan, being 7th most common malignancy in men and 6th most common in women in Karachi.² Oesophageal endoscopic submucosal dissection (E-ESD) employed in the treatment of the above-mentioned cancer has an incidence of delayed bleeding of about 1.3-6.7%.¹ The prevalence of gastric cancer across Pakistan was about 2-18%,³ for which endoscopic submucosal dissection is often used has an incidence of delayed bleeding of 4.7-15.6%.¹ Endoscopic therapy for gastroesophageal varices can also result in delayed bleeding, the incidence of which easily reaches up to 10%.¹

In a retrospective cohort study of 124,422 patients conducted in Japan, it was found that vonoprazan was more effective in reducing the risk of delayed bleeding compared to omeprazole (OR= 0.75).¹ Vonoprazan works by competitively inhibiting the potassium-acid channel resulting in strong and sustained acid inhibition.⁴ It was also found to have a superior effect in the eradication of H Pylori and an equal effect in acid-related disorders.⁵

In the retrospective study mentioned above, it is also worth noting that the efficacy of vonoprazan was variable with respect to procedures and was most prominent with gastroduodenal endoscopic submucosal dissection (OR=0.70).¹ Other procedures did not elicit any significant difference. In addition, standard/high dose vonoprazan

proved to be most efficacious in reducing the risk of delayed bleeding compared with standard/high-dose PPI and low-dose vonoprazan. It was also observed that patients taking anti-thrombotic medications at a higher risk of delayed bleeding also benefited from high-dose vonoprazan (OR=0.74).¹ The findings above compel the conclusion that high dose vonoprazan should be ideal for reducing the risk of delayed bleeding in patients who have undergone gastroduodenal endoscopic submucosal dissection and/or are on anti-thrombotics.

Though high-dose vonoprazan does look promising, it is imperative that more randomized controlled trials on more diverse populations be conducted to further explore its efficacy and safety as the drug might be a potential first line of therapy.

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