

Proton pump inhibitors and the risk of rhabdomyolysis: A call for judicious use in Pakistan

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Dear Editor, Proton pump inhibitors (PPIs) are used in various gastric pathologies, including GERD, esophagitis, and ulcers. Some significant PPIs are esomeprazole, lansoprazole, omeprazole and rabeprazole. These drugs act by irreversibly inhibiting H⁺/K⁺ adenosine triphosphatase pumps in parietal cells of the stomach, thereby effectively suppressing gastric acid secretion.¹ Long term use of ppi can result in various adverse effects like enteric infections, kidney injury, bone fractures, Clostridium difficile-associated diarrhoea, and impedes the absorption of micronutrients.²

Some studies show that rhabdomyolysis is linked to PPIs use. Recently an analysis has been done by KATSUHIRO OHYAMA et al on the basis of JADER data comprising of patients from 2004 to 2022 on the proton pump inhibitors and the onset of rhabdomyolysis (RM). The median day at which RM started for orally administered esomeprazole was 6.5(2-25) day and for omeprazole it was 127(17.5-196) day which is the largest value. Additionally for intravenous administration of omeprazole, the median day for RM onset was 2(1-6)d. Omeprazole, being extensively used as an intravenous and oral drug, most frequently cause rhabdomyolysis. For all orally administered drug, the recovery rate was 80%, while mortality was reported in all drugs, except vanoprazon.³

Overutilization of PPIs in Pakistan has been observed since

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late 1980s. Every indoor patient is being prescribed with proton pump inhibitors as a prophylaxis for stress related mucosal disease.⁴ We can reduce the adverse effects of PPI by conducting the regular training and workshops for doctors, nurses and pharmacist about the proper indications of PPI use as per the guidelines of AGA, terminating over the counter sale, alternative therapies such as H₂ blockers may be considered, encourage lifestyle modifications, using step-down therapy and regular review of PPI prescription. Physicians should also be aware of the Rhabdomyolysis risk and look for such adverse effects in patients with long term PPI use. By implementing these measures in Pakistan, healthcare providers can help mitigate the risks associated with PPI overutilization and improve patient care outcomes.

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