

### **Trends for Admission and Mortality in Peptic Ulcers at a Tertiary Referral Hospital During the 2017-2021 Period**

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#### **Abstract**

*Background:* The incidence of peptic ulcers has decreased during the last decades; the COVID-19 pandemic may have influenced the peptic ulcer hospitalizations. The study aimed to assess the admissions and mortality for complicated and uncomplicated peptic ulcers and the influence of the pandemic period.

*Material and Methods:* We performed an observational study at a tertiary academic center, including all patients admitted for peptic ulcers between 2017-2021. We evaluated the admissions for complicated and uncomplicated ulcers and risk factors for mortality.

*Results:* 1416 peptic ulcers were admitted, with an equal proportion of gastric and duodenal ulcers; most patients were admitted for bleeding (66.7%), and perforation (17.3%). We noted a decreasing trend for peptic bleeding ulcer (PUB) and uncomplicated ulcer admissions during 2020-2021, while for perforation no significant variation was recorded; a decreasing mortality in PUB was noted from 2017 to 2020. Admissions for bleeding peptic ulcer have decreased by 36.6% during the pandemic period; the mortality rate was similar. Admissions for perforated peptic ulcer have decreased by 14.4%, with a higher mortality rate during the pandemic period (16.83 versus 6.73%).

*Conclusions:* A decreasing trend for PUB admissions but not for perforated ulcers was noted. Admissions for PUB have decreased by more than 1/3 during the pandemic period, with a similar mortality rate. Admissions for perforated peptic ulcers have decreased by 1/7, with significantly higher mortality rates during the pandemic period.

**Key words:** peptic ulcer, bleeding peptic ulcer, perforated peptic ulcer, stenosing peptic ulcer, penetrating peptic ulcer, COVID-19 pandemic