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ATYPICAL COURSE, COMPLICATIONS AND TREATMENT OF GASTRIC AND DUODENAL PEPTIC ULCER DISEASE IN OLDER ADULTS

Gocha Barbakadze[1], Manana Jebashvili[2]

[1]Enmedic Clinic; Tbilisi, Georgia

[2]Head of the Postgraduate Gastroenterology Residency Program; Tbilisi, Georgia

Background: Peptic ulcer disease (PUD) affecting the stomach and duodenum in older adults presents a distinct clinical paradigm characterized by silent, aggressive, and highly atypical phenotypes. Age-related mucosal atrophy, compromised microvascular perfusion, and structural changes drastically alter the defensive mechanisms of the gastroduodenal barrier. Consequently, life-threatening complications like acute gastrointestinal hemorrhage or visceral perforation frequently manifest as the primary clinical presentation in emergency departments without any prior classic warning signs or dyspeptic history.

Objective: Based on the scientific update works, this study evaluates the distinct clinical and pathophysiological features characterizing the atypical progression of gastric and duodenal ulcers in geriatric patient populations. It aims to optimize early diagnostic matrices and reduce mortality rates associated with silent gastroduodenal lesions.

Methods: A comprehensive retrospective clinical analysis was conducted on elderly patient cohorts presenting with confirmed PUD complications. Diagnostic stratification evaluated structural mucosal changes via upper endoscopy, comprehensive polypharmacy mapping, and *Helicobacter pylori* testing metrics. Pathophysiological trends were correlated with clinical presentation variations, specifically analyzing the masking effects of medications and age-dependent neuro-sensory visceral variations.

Results: The findings indicate that 30% to 40% of geriatric PUD cases develop completely asymptomatically, demonstrating a classic "silent" clinical course. This painless progression is driven by the age-related atrophy and reduced sensitivity of visceral nociceptive nerve receptors, which effectively blocks classical pain signaling pathways. Furthermore, widespread polypharmacy—specifically the frequent use of non-steroidal anti-inflammatory drugs (NSAIDs) for chronic arthralgia—suppresses prostaglandin synthesis, directly damaging the mucosal lining

while masking ulcer-induced distress. Instead of typical epigastric burning, the disease manifests through atypical equivalents, including early satiety, anorexia, unexplained weight loss simulating malignancy, or referred pain in the chest and back. Primary presentation with severe complications remains exceptionally high; occult bleeding often presents solely as progressive iron-deficiency anemia or chronic fatigue. Massive hemorrhage rarely self-terminates due to advanced age-related arteriosclerosis. Crucially, visceral perforation frequently occurs without abdominal rigidity, presenting instead as sudden-onset delirium, unexplained tachycardia, or profound hypovolemic and septic shock.

Conclusion: PUD in older adults represents a high-risk clinical entity that bypasses classic symptom thresholds due to visceral desensitization and heavy NSAID use. High *H. pylori* prevalence coupled with extensive polypharmacy exponentially elevates the incidence of sudden, painless perforation and refractory bleeding. Incorporating proactive endoscopic screenings and strict pharmacological management is vital to mitigate devastating catastrophes and optimize survival outcomes in vulnerable elderly cohorts.

Keywords: Peptic Ulcer, Geriatrics, Polypharmacy, Perforation