



BACKGROUND AND HYPOTHESIS

- Among immune-related adverse events (irAE) associated with immune checkpoint inhibitors (ICI), immune-related gastritis (IMG) has been rarely described in the literature and has not yet been well characterized.
- This systematic scoping review aimed to characterize IMG in terms of precipitating agents, clinical presentations, and prognosis.

METHODS

- Following the PRISMA Extension for Scoping Reviews, we searched MEDLINE and EMBASE for all peer-reviewed articles using keywords including “gastritis”, “immune checkpoint inhibitor”, and “immune-related adverse event” from their inception to December 28, 2021.

RESULTS

- Twenty-two articles, including five observational studies and 17 case reports and case series, were included.
- Nivolumab, pembrolizumab, and combination therapy with those and cytotoxic T lymphocyte-associated antigen-4 (CTLA-4) inhibitor (ipilimumab) were commonly used in those with IMG.
- 59.8% had epigastric pain, and 50% had erosive gastritis. 87.5% had Common Terminology Criteria for Adverse Events (CTCAE) grade 3 gastritis, and 91.2% received corticosteroids.
- Recurrence was noted in 16.7%, and only one expiration was noted. 4.3% had positive helicobacter pylori (H. pylori) and cytomegalovirus from the gastric specimen.

CONCLUSIONS AND RECOMMENDATIONS

- Similar to immune-related colitis, patients with IMG may have a favorable prognosis with a better response to ICIs if treated appropriately.
- The diagnosis of IMG is made by exclusion, and a thorough workup is necessary to rule out concurrent H. pylori and cytomegalovirus involvement.
- Further studies are critical for a better understanding of this complication.