SUNTEXT REVIEWS

SunText Review of Medical & Clinical Research
ISSN: 2766-4813

Open Access
Case Report
Volume 7:1

Anaphylactic Shock Due to Pantoprazole Complicating an Obstetric Scenario: Clinical Case

Montes-Duran AM[1], Arredondo GP[2,*], Rodriguez ALV[3] and Ventura-Rios L[4]

[1]*Medical Doctor, General Hospital Playa del Carmen, Mexico*
[2]*General Surgeon, General Hospital Playa del Carmen, Mexico*
[3]*Gynecology &Obstetric Department, General Hospital Playa del Carmen, Mexico*
[4]*Rheumatologist, General Hospital Playa del Carmen, Mexico*

[*]**Corresponding author:** Arredondo GP, Gynecology-Obstetrics Service of the Playa del Carmen General Hospital Constituyentes Avenue, s/n, and 135th Street, Ejidal Colony, Playa del Carmen, Quintana Roo, Mexico; E-mail: gpadronarredondo@hotmail.com

Received date: 14 December 2025; **Accepted date:** 02 January 2026; **Published date:** 06 January 2026

Citation: Montes-Duran AM, Arredondo GP, Rodriguez ALV, Ventura-Rios L (2026) Anaphylactic Shock Due to Pantoprazole Complicating an Obstetric Scenario: Clinical Case. SunText Rev Med Clin Res 7(1): 241.

DOI: https://doi.org/10.51737/2766-4813.2025.140

Abstract

Introduction: Proton pump inhibitors (PPIs), such as pantoprazole, are widely used drugs for the prophylaxis of pulmonary aspiration in obstetric and surgical settings. However, anaphylactic reactions induced by these drugs are rare but potentially life-threatening events that require a high degree of suspicion and immediate management.

Case presentation: We present the case of a 29-year-old primigravida woman at term, with a history of NSAID allergy, admitted for a planned cesarean section. During preoperative preparation, she received intravenous pantoprazole and at once, presented with dyspnea, generalized rash, severe hypotension, cyanosis, and bronchospasm, consistent with anaphylactic shock. She required advanced management with orotracheal intubation and emergency cesarean section. The newborn presented respiratory arrest at birth and was successfully resuscitated. The mother later experienced an obstetric hemorrhage secondary to uterine atony, which was surgically controlled. Both infants had a favorable outcome.

Discussion: Anaphylactic reactions to PPIs are extremely rare and often not considered in routine clinical practice. This case highlights the importance of adequate allergy risk assessment and limiting prophylactic PPI used to strictly written-down situations. Furthermore, it shows the need for rapid response protocols for severe allergic reactions in the obstetric setting.

Conclusion: Pantoprazole can trigger severe anaphylactic reactions even in patients with no known history of allergy to this drug. The use of PPIs in obstetrics should be considered and restricted, always prioritizing maternal and fetal safety. Reports such as this one contribute to improving pharmacovigilance and alerting the medical community to this risk.

Keywords: Anaphylactic shock; Pantoprazole; Pregnancy; Obstetric hemorrhage; Cesarean section

Introduction

The proton pump inhibitor (PPI) omeprazole appeared on the market in 1989 for the treatment of peptic ulcer disease.

Haeney in 1992 reported a case of angioedema and urticaria associated with the administration of omeprazole, and in 2000, two cases of anaphylactic reactions secondary to the use of PPIs omeprazole and lansoprazole, respectively, both administered orally.The Uppsala Monitoring Center had received a total of forty-two case reports of anaphylactic reactions associated with PPI use. These cases currently are 0.02% to 1.04% of all anaphylactic reactions to PPIs in conjunction with H2 inhibitors [1-3].

Clinical Case

A 29-year-old primigravida female at 40 weeks' gestation was admitted to the hospital's gynecological-obstetric emergency department for a scheduled cesarean delivery with early signs of labor and prenatal care, including a threatened miscarriage at 12-13 weeks' gestation and an allergy to NSAIDs. Triage upon

admission was code green (unqualified emergency) with normal vital signs. Upon admission, placed on a heparinized catheter and prescribed Hartmann's solution 500 ml/8 h, pantoprazole 40 mg IV, metoclopramide 10 mg IV, and cefotaxime 1 g IV, all as a single dose. The patient at once began to present dyspnea, hyperemia, cyanosis, sialorrhea, laryngeal itching, and hypotension (80/40 mmHg, heart rate of 131 beats per minute). The patient was conscious, disoriented, with respiratory difficulty, cyanosis of the perioral and upper and lower limbs, generalized pruritus, piloerection, and generalized erythema; she presented signs of bronchial spasm. The mother's code was activated, and conventional anaphylactic shock treatment started without improvement. Orotracheal intubation was performed with manual ventilation, which progressed to mechanical ventilation. Delivery performed by Kerr cesarean section without incident. A live male product was obtained with signs of respiratory arrest requiring advanced neonatal resuscitation with Apgar 5-8, Capurro 40 weeks of gestation and was transferred to the Neonatal Intensive Care Unit; the mother was transferred to the recovery room where she presented bleeding through the surgical wound and transvaginal of approximately 200 ml. with uterine atony and is transferred back to the operating room where Lynch type B hemostatic suture is performed plus ligation of uterine arteries plus Haymann suture with control of hemorrhage and is transferred to the Intensive Care Unit with a 12-day hospital stay and in good health.

Discussion

PPIs block gastric acid secretion by inhibiting the adenosine triphosphate/potassium enzyme system. These medications are used to treat gastric ulcers, esophagitis, duodenal ulcers, Zollinger-Ellison syndrome, Barrett's esophagus, and gastroesophageal reflux disease. Anaphylaxis is a potentially life-threatening allergic reaction that affects multiple organs, including the cardiovascular and respiratory systems. This reaction is triggered by the degranulation of mast cells and basophils. Delay in treating anaphylaxis can lead to hypoxia, ischemia, encephalopathy, and even death. Common reactions to PPIs include headache, diarrhea, nausea, and dizziness. Rare, severe reactions include anaphylaxis, Stevens-Johnson syndrome, toxic epidermal necrolysis, and renal and hepatic impairment [4, 5].Side effects of PPIs occur in 1 to 3% of prescriptions for these widely used drugs, which are administered orally or parenterally, and in many cases are not prescribed for any peptic acid disease but as hydrochloric acid inhibitors to prevent gastroesophageal reflux, such as Mendelson's syndrome, in the induction of general anesthesia or as a prokinetic adjuvant in surgical patients. Gupta [6] reported two cases of young women aged 32 and 38 years with severe anaphylactic reactions after oral intake of 40 mg of pantoprazole. Yadav et al. reported a case of a 40-year-old woman who presented an anaphylactic reaction after oral intake of 40 mg of pantoprazole, requiring intensive care for 24 hours. Yadav [7] reported a case of a forty-year-old female patient who presented clinical symptoms of anaphylactic shock after ingesting a 40 mg pantoprazole tablet and needed intensive care monitoring for 24 hours.

Alolabi [8] also reported a case of a 39-year-old woman with repeated episodes of severe allergy symptoms lasting 1.5 h, and up to that point she had presented 8 episodes during one year, related to the intake of 40 mg pantoprazole tablets without associating it with her intolerance to that medication. Faaridaalaee [9] reported a case of a 21-year-old woman admitted to the emergency room with gastritis and prescribed 40 mg intravenous pantoprazole. Two minutes later, she began showing clinical signs of anaphylactic shock, with resolution of symptoms two hours after treatment for the shock. She stayed under observation for 12 hours. Kakode [10] reported a case of anaphylactic shock in a 38-year-old woman exposed to pantoprazole with moderate pruritus on three occasions after ingestion of the drug, unrelated to this drug intake. Bahuguna [11] reported a case of a 64-year-old woman with signs of gastritis who developed at once controlled anaphylactic shock after administration of 40 mg of IV pantoprazole, which improved quickly. Telaku [12] presented a case of a 42-year-old woman with peptic ulcer disease who was prescribed IV pantoprazole, as well as another 58-year-old woman who took 40 mg of oral pantoprazole, both of whom received treatment for anaphylactic shock and were discharged from the hospital in good general condition. These cases prove that pantoprazole in any oral or parenteral form can develop severe allergies to anaphylactic shock. Palha [13] reported a case of a 69-year-old female administered IV pantoprazole before ophthalmology surgery and developed anaphylactic shock. This case is like ours, in which proton pump inhibitors were administered without a precise indication before surgery. Safdar EA [14] presented a case of a 55-year-old female who ingested oral pantoprazole 40 mg for reflux symptoms and developed moderate allergy symptoms that resolved with conventional treatment. Sandhya M [15] reported a case of a 45-year-old male who developed symptoms of anaphylactic shock on two occasions; male cases are rarer than female cases.

James J [16], present the case of a 75-year-old female with data of gastrointestinal disease administered pantoprazole and developed symptoms of anaphylactic shock with adequate treatment and recovery. The authors mention that the administration of PPI is widely used even in cases where it has no precise sign. Park IY [17], report a case of a 47-year-old female with data of anaphylactic shock after administration of 30 mg of lanzoprazole for symptoms of epigastric pain one hour after its intake with data of anaphylactic shock, where the epidermal tests were positive for lanzoprazole, Rabeprazole, and negative for omeprazole and

pantoprazole among other results and recommend the use of these tests (The skin prick test (SPT) and the intradermal test (IDT).

Conclusion

PPIs such as pantoprazole can trigger severe anaphylactic reactions, even in settings where they are used. Their sign-in obstetrics was carefully evaluated, limiting it to strictly necessary cases. A thorough history of allergies and earlier reactions recommended, as well as close monitoring after the administration of any potentially allergenic medication. Reporting cases like this is essential to raise awareness among the medical community, update protocols, and strengthen pharmacovigilance.

Informed Consent

Written informed consent was obtained from the patient for the publication of the case report.

Conflict of Interest

We have no conflict of interest.

Financial Support

The authors declare that this study has not received financial support.

References

1. Haeney MR. Angioedema and urticaria associated with omeprazole. BMJ. 1992; 305: 870.
2. Natsch S, Vinks MH, Voogt AK, Mees EB, Meyboom RHB. Anaphylactic reactions to proton-pump inhibitors. Ann Pharmacother. 2000; 34: 474-476.
3. Aydin AA, Bilge S, Duzenli T, Aslan H, Aydin G. Lansoprazole as an uncommon cause of anaphylaxis: What to give next? North Clin Istanbul. 2018; 6: 315-316.
4. Yousefi H, Moayedi S, Harorani M, sahebi A. Anaphylaxis as a side effect of pantoprazole. Shiraz E-Med J. 2020; 21: e97458.
5. Demir S, Erdenen F, Gelincik A,Unal D, Olgac M,Coskun R, et al. Evaluation of the potential risk factors for drug-induced anaphylaxis in adult patients. Int Arch Allergy Immunol. 2019; 178: 167-176.
6. Gupta PP, Bhandari R, Mishra DR, Agrawal KK, Bhandari R, Jirel S, et al. Anaphylactic reactions due to pantoprazole: case report of two cases. Int Med Case Rep J. 2018; 11: 125-127.
7. Yadav A, Das I, Yadav D. A rare case of pantoprazole-induced anaphylactic shock. Current Res. 2019; 11: 7522-7523.
8. Alolabi R, Liem JJ. Pantoprazole-induced anaphylaxis. J Allergy Clin Immunol. 2019; 143: AB73.
9. Faridaalaee G, Ahmadian Heris J. Anaphylaxis as a Rare Side Effect of Pantoprazole; Case Report. Emergency. 2018; 6: e34.
10. Kakode KP, Kakode VP. A rare case of adverse drug reaction to pantoprazole three times in the same patient: a case report. Natl J Physiol Pharm Pharmacol. 2019; 9: 1052-1055.
11. Bahuguna R, Joshi D, Rana M. A case report on allergic reactions to pantoprazole. Int J Sci Healthcare Res. 2021; 6: 82-86.
12. Telaku S, Veliu A, Zenelaj Q, Telaku M, Fejza H, Alidema F, et al. Anaphylaxis caused by taking pantoprazole: case series. EJCRIM. 2023;10.
13. Ribeiro AP, Goncalves A, Mateus C, Ribeiro AP, Mexedo C. Beyond the Usual: Pantoprazole-Induced Anaphylaxis During Peribulbar Anesthesia. Cureus. 2023; 15: e38738.
14. Safdar EA, Safdar NA. Pantoprazole-induced angioedema - A Case Report. J Am Med Sci Res. 2024; 3: 15-16.
15. Sandhya M, Shaikh Shabaz, Sreelatha J. Pantoprazole-induced Anaphylactic Shock: A Case Report. Int J Res Publ Rev. 2023; 4: 3360-3362.
16. James J, Rani J, Sathyanarayanan V, Begum A, Fayaz SH. Anaphylaxis to pantoprazole: a case report and prerequisite for vigilant prescribing practices for proton pump inhibitors. Curr Drug Saf. 2022; 17: 78-80
17. Park IY, Do BJ, Ahn JS, Lee JH, Lee JH, Kim S, et al. Anaphylaxis to lansoprazole with tolerance to other proton pump inhibitors. Allergy Asthma Respir Dis. 2014; 2: 383-386.