



## CASE REPORT



# CASE OF HIATUS HERNIA: AN AGGRAVATING FACTOR FOR IRON DEFICIENCY ANEMIA

Atharva Nanday<sup>1\*</sup> | Vedant Patil<sup>2</sup> | Punam Kela<sup>3</sup>

<sup>1</sup>3rd Year Pharm D, PES's Modern College of Pharmacy, Nigdi Pune-411044, Maharashtra, India

<sup>2</sup>3rd Year Pharm D, PES's Modern College of Pharmacy, Nigdi Pune-411044, Maharashtra, India

<sup>3</sup>Department of Clinical Pharmacy, PES's Modern College of Pharmacy, Nigdi Pune-411044, Maharashtra, India

### Abstract

Hiatus hernia (HH) is the herniation of stomach into the chest cavity through diaphragm. HH is idiopathic and hence its exact cause is not known; possible causes are age related changes in diaphragm and inborn large hiatus. [1] Cameron lesions are yet another indicative for hiatus hernia. The purpose of this case report is highlighting various sources of the above condition which lead to worsened patient condition leading to hospitalization.

Current case is a presentation of heme fibroid, duodenal Cameron lesion and type 1 hiatus hernia leading to worsened iron deficiency anaemia. For the efficient management of patient a proton pump inhibitor and vitamin B complex was advised.

Keywords: Hiatus Hernia, Iron deficiency Anemia, Proton Pump Inhibitor, Heme Fibroid

## 1 | INTRODUCTION

**A**naemia induction with a hiatus hernia is generally an uncommon presentation. The prevalence of both the conditions co-existing is very low (6 to 7%).[1] But, HH might contribute the iron deficiency anaemia due to excessive bleeding from the Cameron lesions and peptic ulcers.[2] In present case, type I HH is present hence completely harmless thus chances of GI bleeding are almost diminished. The condition was brought in light by an upper endoscopy. There is no documented data available for treatment of anemic patients with a hiatus hernia with proton pump inhibitors but the same are found to be effective at some extents.[1] This case report focuses upon depletion of patient's anemic condition due to the

mentioned underlying causes.

**Supplementary information** The online version of this article (<https://doi.org/10.15520/ijmhs.v10i09.3083>) contains supplementary material, which is available to authorized users.

**Corresponding Author:** Atharva Nanday  
3rd Year Pharm D, PES's Modern College of Pharmacy, Nigdi Pune-411044, Maharashtra,  
Email: [atharvananday7@gmail.com](mailto:atharvananday7@gmail.com)

## 2 | CASE REPORT

A 55 year old female was admitted to hospital with complaints of weakness, diarrhea, vomiting, severe anemia and edema with slight dyspnea. After going through past medical history it was found out that patient is a known case of non-pitting edema with severe anemia and also has history of black stool since last 50 days. Patient had lost 2 kg in last 2 months. There is no history of hemorrhoids and constipation. The provisional diagnosis was found to be non-pitting edema with severe anemia. Patient's Hb on admission was 2.5 mg/dl. On examination BP-130/80 mm Hg. Investigations advised to the patient were Renal Function test, Urine analysis, Ultrasonography and an upper GI tract Gastrosocopy (Endoscopy). The upper GI endoscopy showed hiatal hernia and enteral duodenal nodularity whereas the USG report highlighted 1.6 – 1.8 cm myometrium uterine heme fibroid to the posterior wall body.

**TABLE 1: Laboratory Findings**

Sr no.	Test	Observed Value	Reference Value
1.	Hb	2.5 mg/dl	12-15 mg/dl
2.	Renal Function Test		
• a.	Sodium	137 mEq/L	136 – 145 mEq/L
• b.	Potassium	3.6 mEq/L	3.5- 5.1 mEq/L
c.	Chloride	109 mEq/L	98- 107 mEq/L

Based on the clinical findings, patient was diagnosed as a known case of anemia with a Hiatus Hernia. Patient was transfused with 4 units of PCV during their stay (1 unit per day). The patient was treated with Optineuron Inj., Vibact, Normal Saline and Pantoprazole.

The patient was kept under observation after the final diagnosis and PCV administrations and medications were continued. On discharge patient had reduced edema and pallor. Patient was discharged after the consecutive day of PCV administration with medications Neurobion forte Tab and Pan 40 for 14

days

## 3 | DISCUSSION

In this case, the anemic condition of the patient was deteriorated due to unawareness of the previous physician leading to patient's hospitalization. Patient's condition improved after the administration of vitamin B complex (Optineuron) as some studies show effectiveness of vitamin B in breaking / wearing off the fibroid masses.[3] Also due to hematocrit administration the iron deficiency of the patient was quickly improved. Surgical repair of the herniation was not required due to very minor discomfort to the patient. The controlled management of case by hematocrit transfusion, PPI and Vitamin B complex led to healthy recovery of the patient.

## 4 | CONCLUSION

This case report is a conclusive evidence that presence of heme fibroid, a type 1 hiatus hernia and duodenal nodules can lead to a complex worsened anemia if the latter two conditions remain undetected.[4] Hence every other person with even a mild GI symptom with Anemia must be re-examined by the attending physician before planning further treatment perspectives in the same.[5][6] These re-examination precaution method can help bringing light on hidden conditions and contribute towards a speedy recovery of patient without any further complications. (1–6)

## REFERENCES

- Holt JM, Mayet FGH, Warner GT, Callender ST, Gunning AJ. Iron Absorption and Blood Loss in Patients with Hiatus Hernia. *BMJ*. 1968;3(5609):22–25. Available from: <https://doi.org/10.1136/bmj.3.5609.22>. doi:10.1136/bmj.3.5609.22.

2. Fibroids WCU. What are uterine fibroids,” MRI-Guid. Focus Ultrasound Surg. 2007;111.
3. Gomes RR. A case of giant hiatal hernia in an elderly patient: When spleen, stomach, duodenum and colon slide into thorax- A rare cause of dyspnea and chest pain. The Gazette of Medical Sciences. 2020;1(3):007–012. Available from: <https://dx.doi.org/10.46766/the-gms-pulmonology.20070402>. doi:10.46766/the-gms-pulmonology.20070402.
4. ; 2020. Available from: <https://www.sages.org/publications/guidelines/guidelines-for-the-management-of-hiatal-hernia/>.
5. Panzuto F, Giulio ED, Capurso G, Baccini F, D’Ambra G, Fave GD, et al. Large hiatal hernia in patients with iron deficiency anaemia: a prospective study on prevalence and treatment. Alimentary Pharmacology and Therapeutics. 2004;19(6):663–670. Available from: <https://dx.doi.org/10.1111/j.1365-2036.2004.01894.x>. doi:10.1111/j.1365-2036.2004.01894.x.
6. Maganty K, Smith RL. Cameron Lesions: Unusual Cause of Gastrointestinal Bleeding and Anemia. Digestion. 2008;77(3-4):214–217. Available from: <https://dx.doi.org/10.1159/000144281>. doi:10.1159/000144281.

**How to cite this article:** Nanday A., Patil V., Kela P. CASE OF HIATUS HERNIA: AN AGGRAVATING FACTOR FOR IRON DEFICIENCY ANEMIA. Innovative Journal. 2020;1222–1224. <https://doi.org/10.15520/ijmhs.v10i09.3083>