# **Case Report**

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# Massive spontaneous hemoperitoneum: known cause from an unknown site

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#### **ABSTRACT**

A 35 years old female presented to casualty with complaints of pain abdomen and vomiting since 3 days. The pain is non radiating type with associated abdominal distension. There is no blood or bike in the vomitus. She has undergone mitral valve replacement 1 month 15 days back and was on prophylactic warfarin medication. On examination vitals were unstable with pallor present and cold extremities. On physical examination. On physical examination: abdominal distension+ guarding+ diffuse tenderness over abdomen+. On USG Abdomen gross collection of blood in the peritoneal cavity. Patient immediately stabilised with 8 units of PRBC. On abdominal laparotomy, active bleeding from right ovarian cyst was observed. Right oophorectomy with peritoneal lavage was done. Hemostasis secured. Postoperative period was uneventful with good post op recovery.

Keywords: Warfarin, Bleeding, Haemorrhage, Peritoneum, Oophorectomy

## INTRODUCTION

Warfarin is an anti-coagulant used in the prevention of thrombosis. Warfarin decreases blood coagulation by inhibiting Vitamin K epoxide reductase, an enzyme that recycles oxidized VitaminK1 to its reduced form after it has participated in the carboxylation of several blood coagulation proteins, prothrombin, and factor VII. Common clinical indications for warfarin in use are atrial fibrillation, artificial heart valves, and deep venous thrombosis.1 Common side effect of warfarin is hemorrhage.<sup>2</sup> Intraperitoneal hemorrhage is one of the complications, usually following trauma.3 There are only few reported cases of the spontaneous hemoperitoneum in the literature.4 Spontaneous onset of the intra-abdominal hemorrhage due to warfarin therapy is also exceptional.<sup>5</sup> We report spontaneous intra-abdominal hemorrhage secondary to warfarin therapy.6

## **CASE REPORT**

## Clinical history and examination

A 35 years old female was referred to casualty with chief complaints of pain abdomen and vomiting since 3 days. Insidious in onset gradually progressive non-radiating pain associated with abdominal distension and not passing flatus and stools. Vomiting spontaneous hemoperitoneum and bile. Patient gives history of mitral valve replacement (chithra mitral valve) 1 month 15 days back for mitral stenosis with severe PAH and history of amenorrhea 1 month 15 days P2L2 (both LSCS) + BAT 8 ½ years back. No history of trauma. Not a known case of DM2 and HTN. Patient was on prophylactic anticoagulants (tablet warfarin 5 mg OD) left one O/E – PR-144 bpm BP-80/60 mmHg. RR-26 cpm, pallor+++ icterus- cold peripherals+ dehydration+ S/E-abdominal distension+ guarding+ diffuse tenderess B.S.absent PR-normal. Clinical

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diagnosis-peritonitis secondary to? spontaneous hemoperitoneum.

#### **Investigations**

Hemoglobin-5.5 g/dl, PCV-11.6, TLC-24,200 cells/cu mm, platelet-1.24 lakh/cu mm, LFT- normal, PT>120sec, aPTT-75.5, UPT- negative, X-Ray abdomen (lateral decubitus)- normal, USG-Gross collection in peritoneal cavity, appendix- normal. Bilateral ovaries could not be visualized.

Diagnostic paracentesis-free flow noted-blood.

In view of above findings and critical illness patient was shifted to ICU.

Patient was resuscitated using blood products IV fluids and inotropes +injection Vitamin K 10 mg IV stat.

Blood products transfused- 8-pint PRBC and 4-pint FFP.

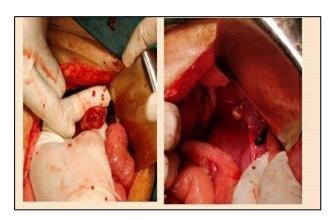


Figure 1: Histopatholohy.

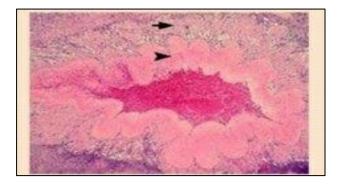


Figure 2: Hemorrhagic corpus luteum of right ovary.

# Procedure

Emergency exploratory laparotomy + right oophorectomy + peritoneal lavage. Intraoperative findings-Gross Hemoperitoneum~3Litres Right adnexal clots with omental migration. Right ovarian cyst measuring 1x1cm with active bleeding.

#### Post-operative period

Post-operative care was given in ICU with strict monitoring of vitals. Extubated on POD2. Cardiology opinion was sought and injection clexane 40 mg BD started. POD7 ADK drain removed. And discharged in stable state on POD10. Review cardiology opinion sought and advised to start on T. Warfarin 2.5 / 5 mg and to adjust INR range between 2.5 to 3.5. Currently patient is on regular follow up.

#### DISCUSSION

A similar case was reported by Manik et al in 2017 which it was managed conservatively. And another case report with acute appendicitis as a cause published in BIO MED by Jayesh et al in 2006. The two most important determinants of the warfarin induced bleeding is the intensity of therapy and the maximal time in therapeutic range. Bleeding is a major complication in the early phase of the warfarin therapy according to the most studies. Bleeding is more likely to occur in the patients with the more intense therapeutic range (INR between 2.5 and 3.5) than in the less intense therapeutic range of warfarin (INR between 2 and 3).

#### **CONCLUSION**

Acute abdomen due to Spontaneous hemoperitoneum is a serious condition demanding careful consideration from the treating surgeon. Though uncommon, everyone sometimes faces such a surgical dilemma and there arises a need to contemplate the multifold and diverse etiology associated with-it. A sound knowledge of the potential causes of acute abdomen and massive spontaneous hemoperitoneum along with a high index of suspicion are necessary for proper patient management.

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