

## Title: A Unique Gynaecological Presentation of a Rare Haematological Condition

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### Introduction

Spontaneous hemoperitoneum secondary to a follicular ovarian cyst rupture is a rare, but potentially life-threatening presentation. We present a case of a 17-year-old with massive hemoperitoneum from an ovarian cyst who presented to a District General Hospital in the United Kingdom. She was diagnosed with pancytopenia which created a diagnostic challenge as the differentials varied from Vitamin B12 deficiency to bone marrow failure.

### Case

A 17-year-old girl presented to us with a two-day history of left iliac fossa pain, associated with postural hypotension and easy bruising. Her urine pregnancy test was negative. A CT scan revealed hemoperitoneum. Hemodynamic stability was ensured with multidisciplinary involvement from haematologist and anaesthetist. A laparoscopy confirmed a ruptured left ovarian follicular cyst with a litre of hemoperitoneum.

#### Blood Parameters on Presentation

- Hb 5.5g/dL, MCV 115FL
- WCC 1900/ $\mu$ L, Platelets 12,000 / $\mu$ L
- Blood smear –macrocytes and polychromasia, with an MCV of 115 FL.
- Coagulation normal. No evidence of haemolysis
- B12 deficiency suspected with mildly reduced levels. Folate normal

#### Blood Parameters on Discharge

- Hb 9.8g/dL, platelets 44,000/ $\mu$ L, WCC - 4000/ $\mu$ L after multiple transfusions
- Started on parenteral B12

#### Blood Parameters on Follow up

Hb 7g/dL, platelets 9000/ $\mu$ L, WCC- 2900/ $\mu$ L

She was supported with weekly transfusions and prophylactic antibiotics. Her viral markers and autoimmune markers were negative. A bone marrow biopsy revealed severe aplastic anaemia

with low level PNH clones. A diagnosis of bone marrow failure was made and she has been referred to a higher Centre for investigations and treatment

### Conclusion

Aplastic anaemia causes pancytopenia due to bone marrow failure. More than 70% of cases are considered idiopathic. The signs and symptoms can be very subtle and difficult to diagnose. This diagnosis requires exclusion of other congenital or acquired marrow failure syndromes. Hence the diagnosis requires close collaboration with haematology specialists. In this case, she had signs of easy bruising and fatigue for many weeks before the presentation, which went undiagnosed. Secondly, the mildly reduced vitamin B12 levels acted as a confounding factor in delaying the real diagnosis.

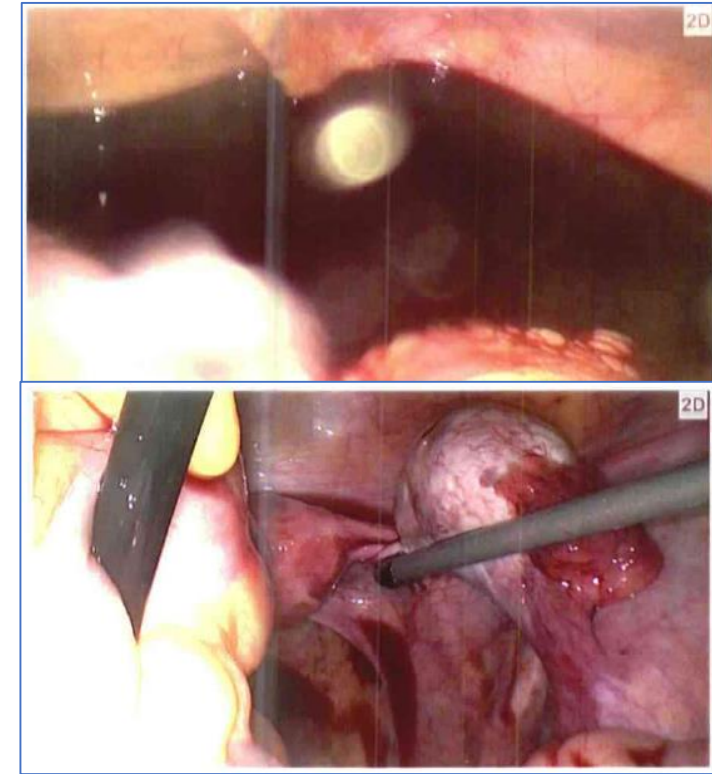


Fig. Hemoperitoneum and ruptured follicular cyst