Conservative approach to massive haemoperitoneum of ovarian origin during anticoagulant therapy

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Summary: Recurrent massive haemoperitoneum of ovarian origin during anticoagulant therapy in a patient with mitral valve prosthesis is described. The patient was treated conservatively on both occassions. The authors suggest that a trial of conservative approach may be considered in such patients.

Key words: Haemoperitoneum; Ovary; Anticoagulant therapy.

INTRODUCTION

Haemorrhagic complications occur in 10% to 40% of patients receiving anticoagulant therapy in order to prevent thromboembolism. Serious bleeding may occur in 2% of hospitalized patients and in up to 10% of ambulatory patients ([3]). Although the ovary is an infrequent site of bleeding, massive haemoperitoneum of ovarian origin resulting from the anticoabulant therapy, may lead to shock and death ([1, 3]). Immediate surgery after stabilizing the patient is usually advocated in cases of massive haemorrhage in such patients. We describe a patient who was on anticoagulant therapy and went through two episodes of massive haemoperitoneum of ovarian origin and was treated conservatively on both occasions.

CASE REPORT

A, 32 year old woman gravida five, para three, abortions two, with a history of mitral valve replacement for severe mitral stenosis and insufficiency due to rheumatic heart disease, treated with anticoagulant (warfarin) and antiarrhytmic therapy presented with sudden onset of abdominal pain followed by abdominal distension. At that time she was diagnosed as having functional class II heart disease (New York Heart Association, 1979). On admission the viral signs were: blood pressure 120/80 mm Hg, respiratory rate 20/min and heart rate 100 beats/min. The abdomen was rigid and tender. On pelvic examination the cul-de-sac of Douglas appeared bulging and tender.

Sonographic examination revealed an extensive amount of free fluid in the peritoneal cavity with an enlarged left ovary floating in sonolucent echoes having the appearance of clots. An immediate culdocentesis was performed revealing unclotting blood. The hemoglobin was 8.2 g/dl, the hematocrit was 24.6%, the platelets count was 215,000 per cubic mm and the prothrombin time was 19%. The beta-subunit of human chorionic gonadotropin was negative. The clinical impression was that the patient had a massive intraperitoneal bleeding originating from ruptured corpus luteum. Since no severe haemodynamic compromise was observed, emergency laparotomy was not advocated, Warfarin was discontinued and parenteral administration of vitamin K, fresh frozen plasma, cryoprecipitate and packed red cells was started and the patient was transferred to the Intensive Care Unit. Two hours later the patient was stabilized and the bleeding subsided. The patient received 6 units of packed red cells and on release from the hospital 14 days after admission, she had an hemoglobin concentration of 11.8 g/dl. The anticoagulant therapy was restarted 7 days after admission.

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Two years later, while still being on anticoagulant (warfarin) and antiarrythmic therapy, she was admitted again with abdominal pain of sudden onset and abdominal distension. The clinical presentation and course during the second episode was identical with the previous one. Sonographic examination revealed an extensive amount of free fluid in the peritoneal cavity and the left ovary enlarged with cystic mass measuring 22x20 mm. The ovary was floating in sonolucent echoes having the appearance of clots. Culdocentesis revealed unclotting blood, the hemoglobin falled to 9.6 g/dl. Again, during the stabilization of the patient, the bleeding subsided. During the second episode the patient recieved five units of packed red cells and on release from the hospital 15 days later she had a haemoglobin concentration of 12.6 g/dl. The anticoagulant therapy was restarted seven days after admission.

DISCUSSION

A review of the literature revealed 31 cases of ovarian origin intraperitoneal bleeding in 27 patients on anticoagulant therapy ([1, 2, 3, 4]). The recurrency rate is estimated to be 19.2%. In all instances but two, the patients underwent laparotomy ([1, 4]). The two patients that did not have a laparotomy died before the diagnosis was established ([3, 4]).

To the best of our knowledge our case is the first one of conservative approach to recurrent massive intraperitoneal bleeding of ovarian origin in a woman on anticoagulant therapy. The diagnosis in our case was made per exclusion and was supported by the sonographic findings and by clinical course. Given the time frame over which the two episodes occurred in this patient, it is apparent she did not have an ovarian malignancy as the cause of her bleeding. Therefore, the diagnosis of intraperitoneal bleeding apparently of ovarian origin would seem warranted.

The conservative approach was not elected by us, indeed the circumstances dictated the management. The patient was not compromised haemodynamically, she represented a poor operative risk and while she was stabilized for laparotomy the bleeding subsided. Furthermore, when there is no intention to castrate a young woman (bilateral adnexectomy), laparotomy may be prevented, concurrently reducing the risk of septicaemia in a patient with mitral valve prosthesis. In accordance with the fact that there were only theree deaths reported in spite of precarious medical condition of these patients ([3, 4]), it seems reasonable to consider a trial of conservative approach, specially in case that the patient represent a poor operative risk and could deteriorate during the laparotomy. Nevertheless in a case that the bleeding continues a prompt exploratory laparotomy is advocated immediately after the patient's stabilization. When considering conservative approach, the morbidity associated with reabsorbing intraperitoneal haematoma should be taken into acount.

Still, considering the recurrency rate and the fact that each additional ovarian cycle poses the threat of recurrent massive bleeding the therapeutic problem of these patients should be resolved. As suggested previously ([2]), long term anovulatory therapy could possibly avoid this potential complication in the menstruating female.

REFERENCES

1) Goldman J. A., Dekel A., Peleg D.: "Ovarian vascular accidents: a complication of anticoagulant therapy". *Eur. J. Obst. Gyn. Reprod. Biol., 8,* 163, 1978.
2) Itskovitz J., Brandes J. M., Urbach J., Fisher M.: "Ovarian hematoma and hemoperitoneum complicating anticoagulant therapy". *Int. Surg., 67* (Suppl.) 533, 1982.
3) Krause J. R., Amores R.: "Massive intraperitoneal hemorrhage from ruptured corpus luteum during anticoagulant therapy". *S. Med. J., 69,* 1220, 1976.
4) Peters W. A., Thiagarajah S., Thornton Jr. W. N.: "Ovarian hemorrhage in patients receiving anticoagulant therapy". *J. Rep. Med., 22,* 82, 1979.

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