

Thrombosis associated with a large uterine myoma: case report

M. Bonito, L. Gulemi, R. Basili¹, G. Brunetti, D. Roselli

Department of Obstetrics and Gynecology, "S. Pietro Fatebenefratelli" Hospital, Rome

¹Department of Obstetrics and Gynecology, "Sant'Andrea" University, Rome (Italy)

Summary

A case of a 49-year-old woman who presented with a large uterine myoma weighing 5000 g and was affected by unilateral deep vein thrombosis of the left leg and pulmonary embolism is presented. After anticoagulant therapy she successfully underwent laparotomic hysterectomy.

Key words: Thrombosis; Myoma; Pulmonary embolism.

Introduction

Uterine myoma is a benign tumor of the uterus. It can cause many complications, such as abnormal uterine bleeding, pelvic pain and pelvic pressure, but the presence of deep vein thrombosis associated with uterine myomas is a rare event [1]. A case of large uterine myoma weighing 5000 g associated with unilateral deep vein thrombosis of the left leg and pulmonary embolism is described.

Case Report

A 49-year-old woman, nonsmoker, gravida 2, para 2, was admitted to the general First Aid Department of "San Pietro Fatebenefratelli" Hospital in Rome in September 2005. Her symptoms included internal surface pain of the left thigh, dyspnea, palpitation and thoracic pain exacerbated by the action of inhalation. Physical examination revealed pain with palpation of the medial surface of the left thigh, no sign of rash or edema. Examination of the abdomen revealed an enlarged addominal mass. Her blood pressure was 130/80 mmHg. Blood tests, an electrocardiogram, chest radiography and arterial blood analysis were performed. Results revealed a hemoglobin level of 8.2 (normal value (NV): 12.5-17.4 g/dl), hematocrit 25.2 (NV: 38.0-51.0%), erythrocytes 3.460 (NV: 4.000-5.500 M/ml), MCV 72.8 (NV: 80.7-95.5 fl), MCH 23.9 (NV: 27.2-33.5 pg), C-troponin I 0.878 (NV: 0.001-0.400 ng/ml), LDH 595 (NV: 180-490 U/l), transaminase 75 (NV: 5-40 U/l), D-dimer 1 (NV: 0.05-0.50 mg/l). The electrocardiogram showed tachycardia (115 bpm) and chest radiography showed bronchovascular reinforcement and minimal cardiomegaly. Arterial blood gases showed pH 7.51, pCO₂ 32 mmHg, and pO₂ 65 mmHg.

She was admitted to the Department of Internal Medicine and anticoagulation therapy was started with heparin 6000 U/daily subcutaneously. Thoracoabdominal angio-computed tomography revealed compressed pelvic veins and a voluminous solid mass (25 cm) in the pelvic and lower abdomen. There was also thrombotic occlusion of the ascending and descending branches of the right pulmonary artery and the descending branch of the

left pulmonary artery. Two days after a vena cava filter was placed and antibiotic therapy administered. The third day abdominal ultrasonography was performed which confirmed a huge solid mass in the pelvis and abdomen, thus the patient was admitted to the Gynecologic Department. She underwent another pelvic ultrasonography where also an ovarian cyst of mm 81 x 79 was noted. Successively she underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy without complications. The time of surgery was 60 minutes. The enlarged uterus weighed 5000 g (Figures 1, 2 and 3). Histologic examination revealed chronic cystic cervicitis, proliferous endometrium, voluminous myoma, the right ovary with a serous cyst, a normal left ovary, and normal tubes. The patient was transferred to the Intensive Care Unit as a precautionary measure where she underwent a blood transfusion. She returned to the Gynecologic Department on the first postoperative day, and she had repeated blood transfusions during the second and fourth day, with a hemoglobin level of 8 mg/dl the sixth day after surgery. She continued antibiotic, anticoagulant, and iron therapy. She was discharged 13 days later. Physical examination and Doppler studies performed in July 2006 demonstrated completely normal pelvic veins with no sign of compression.

Conclusion

Uterine myomas in reproductive age are very frequent with an incidence of 20-25%. The association of deep venous thrombosis with uterine leiomyomata has only rarely been reported [1].

Indications for hysterectomy in a patient with thromboembolic disease include suspicion of malignancy, polycythemia caused by a fibromatous uterus, puerperal complications and compression of the pelvic veins by an enlarged fibromatous uterus [2]. Intraperitoneal organ compression by myomas has been demonstrated: hydroureter and hydronephrosis are well-documented examples [3]. Acute intestinal gangrene and mesenteric vein thrombosis secondary to prolonged pressure from a leiomyoma have been reported. Leiomyomata has been implicated in other cases of acute abdomen as well [3]. The therapy of uterine myoma and deep vein thrombosis

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Fig. 1



Fig. 2

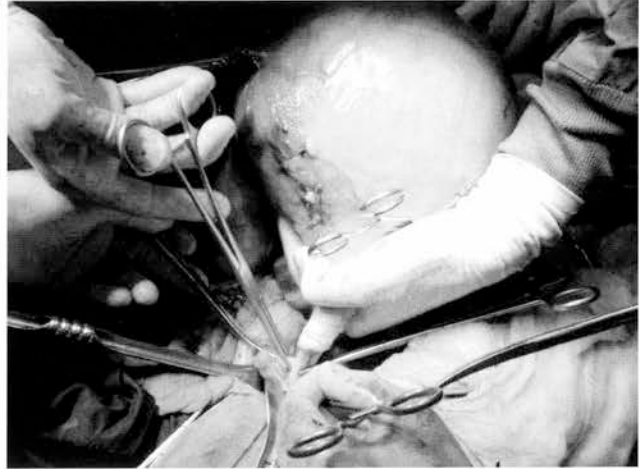


Fig. 3



includes anticoagulant therapy to prevent extension of deep vein thrombosis, followed by hysterectomy [2, 4]. We also used a vena cava filter in the surgical management of the pulmonary embolism. The literature from 1966 to 2005 on deep vein thrombosis associated with uterine myoma was reviewed in Medline where only one case of pulmonary embolism occurring with deep vein thrombosis and uterine myoma was found [4]. In conclusion, although deep vein thrombosis associated with uterine myoma is a rare event, it can be managed successfully with hysterectomy after anticoagulant therapy, as in this case.

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Address reprint requests to:
L. GULEMI, M.D.
Via Delle Gioie, 5
00199 Rome (Italy)