Massive Ascites Complicating Uterine Fibroids: Case Report

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Abstract

A rare case of massive ascites complicating uterine fibroid is presented. At presentation, she was emaciated with grossly distended abdomen and a mass, which corresponded to 36 weeks gestation. At operation a large soft mass attached to the uterus by fibrous strands and to the omentum by large dilated new vessels was seen. It weighed 4.5kg and histology confirmed a degenerated leiomyoma.

Key Words: Leiomyoma, Ascites, Nulliparity, Hysterectomy [Trop J Obstet Gynaecol, 2003, 20: 74-75]

Introduction

Uterine fibroids, otherwise known as leiomyoma or fibromyoma has varied clinical presentation. The association with massive ascites and constitutional upsets simulating ovarian malignancy is a rare occurrence. The association of uterine fibroids with nulliparity and infertility as in this case is widely known [1], though the mechanism of the latter is poorly understood. A case of a 31-year-old nullipara with extensive uterine fibroids and massive ascites is reported.

Case Report

A 31-year-old nulliparous Nigerian woman with a six-year history of inability to conceive and an abdominal swelling of 3 months' duration was seen in our gynaecology clinic. She had anorexia, vomiting, loss of weight and constipation. There was no history of chronic cough. Her last menstrual period was 23:9:2000 and she had a regular 28-day menstrual cycle with flow lasting for four days. She had undergone myomectomy nine years previously.

A day prior to presentation she was taken to a private clinic where paracentesis abdominis was done and about twenty-one litres of straw- coloured ascitic fluid was removed. An abdomino-pelvic scan in the same clinic revealed a non-homogeneous mass at the level of the umbilicus. Other intra-abdominal viscera were normal.

Physical examination revealed an emaciated woman who was afebrile, not pale, anicteric and had no pedal oedema. Her blood pressure was 110/60 mmHG and the pulse rate was 90 beats per minute, regular and of full volume. Both the cardiovascular and respiratory systems were normal. Abdominal examination revealed a grossly distended abdomen with the mass corresponding to a size compatible with a 36-week gestation. The mass was firm and non-tender. The liver, spleen and kidneys were not palpably enlarged.

Vaginal examination revealed healthy vulva and vagina. The abdominal mass moved with the uterus. A diagnosis of uterine fibroids was made. Ovarian malignancy was considered as a possible differential diagnosis.

Her packed cell volume was 38% and the total white blood cell count was 4950 per cubic millimetre, with a normal differential count. The liver and renal function tests were normal. The chest x-ray revealed no pathology.

At surgery, a large softish, smooth, pink tumour, the size of a large fetal head, located in the upper half of the abdominal cavity was seen. The tumour was oedematous, with large dilated new blood vessels attaching it to the omentum. It was completely mobile and attached to the uterus by a fibrous strand. The uterus was completely riddled with fibroids leaving no healthy tissue. There were extensive pelvic adhesions. The right tube and ovary were tangled in adhesions such that only the fimbrial end was free and the right ovary was enlarged to about 3 times its normal size by multiple follicular cysts. The left tube and ovary were matted in adhesions and stretched out by a large fibroid growing beneath them. She had total abdominal hysterectomy, left salpingo-oophorectomy, and reconstruction of the right ovary after a wedge resection.

About 3 more litres of ascitic fluid were drained. The pedunculated mass weighed about 4.5kg. Her recovery was uneventful. Histology revealed degenerate (hyaline) leiomyoma with no evidence of malignancy and the ovarian tissues and ascitic fluid showed no malignant cells.

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Discussion

The case of a 31-year old nulliparous woman with a huge pedunculated, multiple subserous and intramural fibroids complicated by massive ascites was presented. Massive ascites complicating uterine fibroids is rare. Peritoneal effusions are not confined to malignant tumours. However, it creates diagnostic problems when it occurs in association with benign tumours [2]. The origin of the ascitic fluid in association with such benign tumours is a subject of intense speculation. It has been ascribed to exudates from the peritoneum resulting from mechanical irritation by the hard and degenerate tumours [2, 3]. Exudation of fluid from the extensive neo-vascularisation may have been contributory. Rarely, the ascites is complicated by a right-sided hydro-thorax to produce a pseudo – Meig's syndrome [3].

The recurrence of fibroids in our patient, who had had myomectomy done for her previously, was not surprising since this modality of treatment carries a 5-10% risk of recurrence whether from seedling fibroids over-looked at the time of operation or because the stimulus to re-growth is maintained [4].

Management of symptomatic fibroids is particularly difficult in women who have had previous myomectomy, especially in the presence of extensive adhesions. The task is even more herculean when the patient is nulliparous as in the case presented. The intra-operative evidence of extensive pelvic adhesions, which significantly compromised her tubes, and the absence of healthy uterine tissue made a repeat myomectomy a futile exercise. Myomectomy in this situation results in severe morbidity. The use of other less invasive techniques like laparoscopic myomectomy or hysterectomy, transarterial embolization and laser coagulation in an effort to preserve reproductive function were precluded by the extensive adhesions/ascites, size of the fibroids and non-availability of such equipment.

The intent of this communication is to make gynaecologists aware of this unusual presentation of uterine fibroids, as well as the diagnostic dilemma and the challenges of proper treatment.

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