

# **Third grade hydronephrosis owing to giant myoma in pregnant uterus: conservative management**

**V. Leanza, C. Pafumi, L. Ferrara, V. Santonocito, G. Leanza**

Obstetrics and Gynecology Department, Catania University

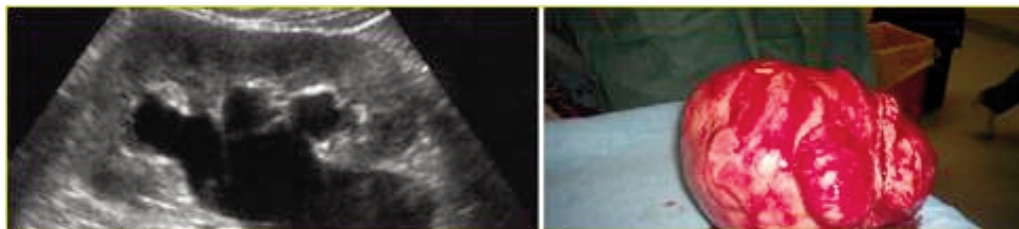
## **Abstract**

Myomectomy during caesarean section (CS) is a controversial procedure because of haemorrhagic risk. Although the presence of myoma in pregnancy is not unusual, the removal of huge myomas overtaking 2 kg is very rare. We present a case of 7 myomas in pregnancy among which a huge mass (cm 22, weight 3.000 g) in a 44 years old nullipara at 38 weeks. Third grade bilateral hydronephrosis “ab extrinseco” was found. Elective caesarean section was performed. A 10 cm long suprapubic transversal incision according to Pfanniestel on spinal anaesthesia was done; a female baby weighing 2.285 g, with Apgar score 9/10 was born. Owing to the uterine hypotonia following foetal extraction, myomectomy with womb preservation was carried out. Ultrasound examination showed a progressive reduction of renal dilatation. Seven days after surgery, both mother and newborn were discharged in good general conditions.

## **Background**

Although the removal of uterine mass during caesarean section (CS) may lead to an increased incidence of haemorrhage, many authors sustain that this procedure is safe.<sup>1,2,3,4</sup> Obstetric literature has reported an increase of successful myomectomy also during pregnancy.<sup>5,6,7</sup> Until today, caesarean myomectomy remains a controversial procedure.<sup>8,9,10</sup> While its performance for obstetric problems is not an extraordinary procedure, we have to consider that the removal of a huge myoma (over 2 kg) is very rare. The management of uterine fibroids during pregnancy is usually expectant; surgery is postponed until C.S. or after patient remission. A case of a third grade bilateral hydronephrosis due to a compression of a huge fibroid in a 44-year-old 38 weeks nullipara solved with uterus preservation successful caesarean myomectomy is reported.

**Fig. 1** – *Hydronephrosis and myoma removed during caesarean section*



## Case presentation

A 44 years old woman reported a two years history of abdominal swelling and epigastric pain. Patient got married at the age of 43 and before being pregnant she underwent gynaecological visit. The abdomen was grossly distended. Ultrasounds examination showed a huge myoma (22 cm) occupying the whole abdominal cavity; other six myomas were spread inside the uterus. After informing the patient about the risk of either myomectomy or expectant treatment, the patient chose the latter. She was pregnant after one month. During pregnancy, abdominal pains compelled the patient to stay mainly in bed, but she never lost the hope of a successful delivery. On the first trimester she suffered from haemorrhage treated with tranexamic acid and progesterone. Folates, vitamins and iron supplements were administered during the whole gestational period. The pregnancy was carefully monitored to check both the foetal growth and the enlargement of the myoma. The patient was admitted in hospital at the 38th week of gestation for a planned C.S. Ultrasound examination showed foetus in a good health. A large myoma occupied most of the uterine walls, compressing both maternal kidneys and foetal body. The patient was given an informed consent explaining the procedure with the potential risk of haemorrhage and hysterectomy. A 10 cm suprapubic transversal incision according to Pfanniestel on spinal anaesthesia was performed; a female baby weighing 2.285 g, Apgar score 9/10 was born. Following the removal of the placenta, the uterus was sewed in two layers suture. Due to uterine hypotonia, we decided to perform myomectomy. A saving skin longitudinal cut of the abdominal fascia was performed, to allow its extraction. Removal of the largest myoma (cm 22, weight 3.000 g) was carried out by lozenge incision of the perimyomatous tissue. Owing to the size of the largest fibroid, the extraction was very difficult. A section of the mass was required to allow its exteriorization. Myometrial bed was quickly closed with an uninterrupted suture followed by a meticulous haemostasis. The remaining 6 myomas were afterwards easily removed. Longitudinal incision of the fascia was closed “ab interno” and, after inserting intraperitoneal drainage, the abdominal wall was sowed in layers. Intradermic suture ended surgery. A 300 cc blood transfusion was necessary. Before the operation haemoglobin was 12.3 g/dL and the values in the five post-operative days were as following 9.1, 7.3, 7.5, 7.9, 8.8 g/dL. Ultrasound examination showed a progressive reduction of renal dilatation. Seven days after surgery, both the mother and her baby were discharged in good general conditions.

## Discussion

The treatment of uterine myoma during pregnancy is largely expectant and its surgical removal is generally delayed until C.S. or after delivery. The prevalence of leiomyoma during pregnancy is reported in a rate of 2%.<sup>(5)</sup> Uterine myoma could be asymptomatic or symptomatic. Red degeneration, increased frequency of spontaneous abortion, preterm labour, premature rupture of foetal membranes, antepartum haemorrhage, malpresentations, obstructed labour, C.S. and postpartum haemorrhage are among the most frequent complications. Due to the increased vascularisation of the gravidic uterus, women are at increased risk of bleeding and postoperative morbidity during myomectomy, and this is why the surgeon's skillfulness is a mandatory issue. Though a case of removal of 40 myomas during caesarean was reported<sup>(11)</sup> and literature shows intracaesarean myomectomy being safe, our opinion is that it still remains an elaborate surgical procedure and is not to be undervalued. Successful myomectomy carried out contemporarily to the cs may solve many problems included "ab extrinseco" hydronephrosis.

## Conclusion

This case report offers to consider mainly the following problems:

*Problem related to the mother:* the choice to perform myomectomy before, during or after pregnancy in a 43 years old woman with no previous children is very difficult to establish. The evaluation must be done in accordance with the site, the size, the number of the myomas and, the last but not the least, the surgical experience. Finally the decision of the mother following an informative consent must be prevailing. When woman with large fibroids becomes pregnant, besides medical therapy, both serenity and rest are mandatory. Furthermore the physicians and the pregnant woman have to be ready to face every sort of events, but it is not established that they arise.

*Condition and development of the foetus:* the foetus must be monitored during pregnancy. A large myoma occupying a lot of space may severely affect the foetal growth.

*Management of myoma:* when myoma is asymptomatic an attendance choice is advantageous.

*Timing and choice of the delivery:* whenever possible, a delivery at term is always to be preferred. In case of previous fibroid CS becomes a compulsory step.

*Hydronephrosis:* during pregnancy the hydronephrosis of urinary tract is not rare. Only in some cases ureteral stent is necessary. As long as clinic condition allows, a waiting management is desirable, till the removal of extrinsic cause may solve the renal dilatation, without compromising other factors.

Such a case interesting for the size of gravidic fibroid (3.000 g) and maternal-foetal welfare was never published in literature.

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