MRS. X was a 28 years old second gravida hailing from Dhaka. Her first child was delivered about 3.5 years back by lower uterine caesarian section (LUCS) at 40 weeks due to non-progress of labour. In her second pregnancy, she was under routine antenatal check up and pregnancy proceeded normally. At about 37 wks of gestation she developed pain in abdomen and back, which was very severe and intermittent in nature. There was scar tenderness and a history of previous LUCS which went for a decision to perform LUCS. It was performed by opening the abdomen with Pfannenstiel incision excising the previous scar. On entering the abdominal cavity, omental adhesion with the anterior abdominal wall was seen. The uterus was found totally levo-rotated to about 180°. Uterovesical fold of peritoneum could not be identified and previous uterine scar was also not visible. It was impossible to untwist the uterus due to its enlargement with pregnancy. A transverse incision was given in the lower part and a healthy male baby weighing 3.4 kg was delivered by vertex presentation. Placenta was removed after spontaneous separation. It was possible to untwist the uterus after delivery of the baby and placenta. It was found that the uterine incision was on the posterior surface of the uterus and the utero-vesical fold was in the normal position.

As uterus was scarred on both surfaces, the patient was counseled and bilateral tubectomy was performed. Postoperatively, the patient remained well and was discharged on the 4th post operative day.

Discussion

Uterine torsion is an infrequently reported and potentially dangerous complication of pregnancy that occurs mainly in the third trimester with adverse maternal and neonatal consequences. The diagnosis is more frequently dextrorotatory. The diagnosis is difficult and generally done during Cesarean section because it is frequently non-symptomatic. Uterine torsion signs, when present, are not specific. Pain, nausea and vomiting may present without any sign of shock, as in this patient. Sometimes ultrasonography can lead to a correct diagnosis, showing a modification of the placenta site during pregnancy, or an abnormal positioning of the ovarian vessels which pass in front of the lower uterine segment. Some authors report cardiotocographic abnormalities probably due to a reduction in the blood flow caused by the torsion. A quick surgical intervention is fundamental for the reduction of fetal mortality which is very frequent in a large number of cases, while maternal mortality is not so frequent but possible. A diligent amniocentesis and ultrasonographic examination are often useful to single out the rare cases of uterine torsion in pregnancy. Deliberate posterior Cesarean hysterotomy is an option for fetal delivery with irreducible torsion, and round ligament plication may prevent recurrent torsion in the immediate puerperium.

Regarding historical background, torsion of the gravid uterus is rare. The earliest report of this condition was made by an Italian veterinarian by the name of Columbia in 1662. Almost 200 years later, in 1863, Virchow reported the first case in a human observed at post-mortem examination. In 1876 this abnormality was described in a living woman for the first time by Labbe. Nesbitt and Corner reviewed this subject in 1956 and found only 107 cases in the world’s literature. Another instance was reported by Piot, Gluck and Oxorn in 1973.

In almost a third of the cases, the condition is usually associated with tumor and presents as an acute abdomen. Complication includes uterine rupture and pulmonary embolism. Treatment is by laparotomy and
detorsion with Caesarian section if at or near term. The overall maternal mortality rates associated with torsion of the gravid uterus is about 13% and is directly related to the duration of the gestation. Under 5 months it is 0% where as at term it reaches 18.5%. It is also directly related to the degree of twisting. It is about 7.4% in torsion of $90^\circ$-$180^\circ$ which increases to 50% when rotation is $180^\circ$-$360^\circ$. Perinatal mortality is about 30% and it increases with the degrees of rotation. It is as high as 75% in rotation exceeding $180^\circ$.

The only hope for a successful maternal and fetal outcome is laparotomy and correction of the torsion. At or near term Cesarean section is the procedure of choice. At an earlier stage, the causative factor should be corrected if possible and the pregnancy be allowed to continue to term.

References


