

Asherman's Syndrome

Haifa A Al-Turki, MBBS, SSC, ABOG, Fellow Rep Med*

We report a case of Asherman's syndrome, which was managed by hysteroscopic adenolysis after Cesarean section and placenta accreta; it resulted in a normal pregnancy and spontaneous uneventful vaginal delivery. Even though our experience is limited but hysteroscopic, release of the adhesions should be attempted initially.

Bahrain Med Bull 2010; 32(4):

Asherman's syndrome (AS), which is often known as an acquired uterine condition, is characterized by the formation of adhesions in the uterine cavity.

The symptoms range from amenorrhea to menstrual disturbance and it is frequently associated with infertility. The true incidence of AS is unknown; but it is estimated to be 1-3% of infertile patients^{1,2}. Even though uncommon in general population, the diagnosis is primarily reached through history and a high index of suspicion.

The aim of this report is to present a case of Asherman's Syndrome, which was managed by minimally invasive surgery and ended in successful pregnancy and normal delivery.

THE CASE

A thirty-five year old Nigerian lady was admitted to the hospital in 2005 for mild pre-eclamptic toxemia and underwent Cesarean section (CS) due to failed induction; a normal healthy baby was delivered. It was observed that the placenta was adherent to the uterus (Placenta Accreta), hence the placenta was left behind and the patient was put on standard methotrexate therapy and covered with broad spectrum antibiotics. Her postpartum period was uneventful.

Postoperatively, the patient complained of amenorrhea of 12 months duration although the hormonal assay was normal. She was managed by progesterone challenge, which failed to induce withdrawal bleeding. After further 16 weeks, she was subjected to dilatation and

*Assistant Professor and Consultant Obstetrician & Gynecologist
Department of Obstetrics & Gynecology
College of Medicine, University of Dammam
King Fahd University Hospital
AlKhobar, Saudi Arabia
Email: drhturki@hotmail.com

curettage which failed to obtain any endometrial tissue. The diagnosis of uterine synechiae was suspected; therefore, the patient was referred to the infertility clinic for further management.

In November 2007, the patient was evaluated and hysteroscopy was performed. Based on the operative findings the diagnosis of Asherman's syndrome was made.

Adenolysis was performed during the same session and an intra-uterine contraceptive device (IUCD) was inserted at the end of the procedure. One month postoperatively, she had normal menstrual cycle. In February 2008, her IUCD was removed and in July the same year, she became pregnant spontaneously. There were no complications during her ante-natal period and ultrasound showed normal localization and vascularization of the placenta. At full term, the patient was delivered vaginally on 26th March 2009, a baby boy with a birth weight of 3.2 kilograms and Apgar score of 9 and 10 at 1 and 5 minutes respectively. The placenta was delivered spontaneously and it was normal. The patient had an uneventful postpartum period and was discharged from the hospital after 48 hours.

Five weeks post delivery, the patient was seen breast feeding her child. She was given progesterone contraception pills.

DISCUSSION

The syndrome was first described in 1894 by Heinrich Fritsch and further characterized by Joseph Asherman in 1948^{3,4}. The severity of Asherman's syndrome varies considerably from complete obliteration of the uterine cavity to minimal adhesions. Asherman's syndrome refers to the formation of intra-uterine adhesions, which typically occurs after repeated dilatation and curettage procedures and other uterine surgeries, such as, Cesarean sections and/or removal of fibroids or polyps. A severe pelvic infection with tuberculosis or schistosomiasis may also lead to AS.

The diagnosis of AS is reached primarily through history taking and a high index of suspicion in patients with amenorrhea and infertility.

The treatment of Asherman's syndrome is still evolving but, at present, the gold standard is surgical removal of adhesions under direct vision using a hysteroscope⁵. The use of balloon fluoroscopy to release adhesions has been reported to be moderately successful⁶. Post surgery reformation of the adhesions is not uncommon and it is suggested that the uterine cavity must be kept open while it heals to prevent adhesions. Yu et al reported an incidence of 11.8% of reformation of adhesions⁷. Roy et al concluded that hysteroscopic adhesiolysis is a safe and effective method in the management of AS⁸. In our patients, hysteroscopic adenolysis had a good outcome.

Even after successful treatment, succeeding pregnancies could end up with complications. Capella-Allouc et al reported a series of 31 patients and only 12 of whom got pregnant and indicated that these pregnancies were at risk of hemorrhage with abnormal placentation⁹.

Outcomes of treatment are difficult to assess as there is no universally agreed upon classification. The range of intra-uterine pregnancies with live births was reported to be 28 to 32%¹⁰.

In this patient, there was a delay in the diagnosis of AS, but once the diagnosis was reached; a meticulous removal of adhesions was performed by the author under direct vision using a hysteroscope.

CONCLUSION

Based on a study of one patient, we are unable to reach firm conclusions but we believe that high index of suspicion should be considered in an amenorrheic and infertile patient with early hysteroscopic intervention. This case provided a degree of clinical confidence that vaginal delivery could be entertained in a patient treated for Asherman's syndrome after CS and placenta accreta.

REFERENCES

1. Fernandez H, Al-Najjar F, Chauveaud-Lambling A, et al. Fertility after Treatment of Asherman's Syndrome Stage 3 and 4. *J Minim Invasive Gynecol* 2006; 13: 398-402.
2. Fedele L, Bianchi S, Frontino G. Septums and Synechiae: Approaches to Surgical Correction. *Clin Obstet Gynecol* 2006; 49: 767-88.
3. Chapman K, Chapman R. Asherman's Syndrome: A Review of the Literature, and A Husband and Wife's 20-year World-Wide Experience. *J R Soc Med* 1990; 83(9): 576-80.
4. Asherman JG. Traumatic Intra-Uterine Adhesions. *J Obstet Gynaecol Br Em* 1948; 55 (2): 2-30.
5. Magos A. Hysteroscopic Treatment of Asherman's Syndrome. *Reprod Biomed Online* 2002; 4 Suppl 3: 46-51. Review.
6. Chason RJ, Levens ED, Yauger BJ, et al. Balloon Fluoroscopy as Treatment for Intrauterine Adhesions: A Novel Approach. *Fertil Steril* 2008; 90(5): 2005.e15-7.
7. Yu D, Li TC, Xia E, et al. Factors Affecting Reproductive Outcome of Hysteroscopic Adhesiolysis for Asherman's Syndrome. *Fertil Steril* 2008; 89(3): 715-22.
8. Roy KK, Baruah J, Sharma JB, et al. Reproductive Outcome Following Hysteroscopic Adhesiolysis in Patients with Infertility Due to Asherman's Syndrome. *Arch Gynecol Obstet* 2010; 281(2): 355-61.
9. Capella-Allouc S, Morsad F, Rongières-Bertrand C, et al. Hysteroscopic Treatment of Severe Asherman's Syndrome and Subsequent Fertility. *Human Reproduction* 1999; 14: 1230-3.
10. Berman J. Intrauterine Adhesions. *Semin Reprod Med* 2008; 26: 349-55.