Reproductive Outcome Following Hysteroscopic Lysis of Intrauterine Adhesions: A Result of 65 Cases at Ramathibodi Hospital

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Abstract

We reported the reproductive outcome of 65 patients with varying degrees of IUAs who underwent hysteroscopic adhesiolysis between August 1994 and December 1996 at Ramathibodi Hospital. Of the 65 patients treated, 29 had mild adhesions, 26 had moderate adhesions, and 10 had severe adhesions. Adhesions were lysed with hysteroscopic scissors in 25, with biopsy forceps through hysteroscope in 10, with electrosurgery using a monopolar probe in 22 patients, and with resectoscope in 8 patients. The mean duration of the procedure was 15±2.1 minutes. The mean follow-up was 12±1.4 months. Of the 44 patients who originally presented with secondary amenorrhea, 40 (90.9%) have normal menses, 4 (9.1%) have hypomenorrhea. Of the 6 patients who had hypomenorrhea, 5 (83.3%) have normal menses. Cyclic abdominal pain disappeared after treatment in all patients. Of the 45 patients with IUAs and infertility, 16 (35.6%) conceived. Two (20%) of the infertile patients with initially severe adhesions conceived. Of the 5 patients with RPL treated, delivered a full term baby and the other delivered a premature baby at 29 weeks of gestation. All 18 patients who delivered, had live births. Adhesion reformation was absent in patients with initially mild and moderate adhesion but occurred in 2 out of 10 (20%) patients with severe adhesions. These two patients initially suffered from secondary amenorrhea but reported hypomenorrhea after surgery. Both of them had tuberculosis of the genital tract. There were no serious complications occurring in all 65 procedures. All 65 patients were discharged a few hours after the operation.

Key word : Intrauterine Adhesions, Hysteroscopic Adhesiolysis, Reproductive Outcome

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Intrauterine adhesions may result in infertility and/or recurrent pregnancy loss (RPL). The incidence of intrauterine adhesions (IUAs) is steadily increasing. The main offender in the etiology of this disorder is trauma to a pregnant uterus, especially after curettage in puerperium or after missed abortion. Other causes include genital tuberculosis and previous uterine surgery.

Amenorrhea and/or menstrual aberations, infertility, and recurrent pregnancy loss after any uterine trauma should cause the physician to suspect the presence of IUAs. Pregnancy achieved after IUAs may be complicated by RPL, premature labor, placenta previa and placenta accreta. The diagnosis of this condition is mainly made by hysterosalpingography and/or hysteroscopy. The clinical use of hysterosalpingography (HSG) has made it possible to diagnose the condition of IUAs fairly accurately. However, hysteroscopy is of great help in avoiding misleading of HSG, in that it can confirm the presence and location of the adhesions more distinctly(1).

Hysteroscopy provides a simple, safe, and effective means of diagnosing intrauterine abnormalities. Both diagnostic and operative hysteroscopic procedures have become increasingly common, essential, and popular in the field of gynecology in the past few years.

Hysteroscopy now plays a major role in the rapidly changing therapeutic approach to the diagnosis and treatment of uterine synechiae. The fibrous nature of the lesion and its precise localization can be determined. Operative hysteroscopy has greatly benefited from technological progress in optic fibers and instrumentation. It is now possible to control the endocavitary operation with a videoendoscope.

The purpose of our study was to report our initial outcome of hysteroscopic lysis of IUAs in restoring normal menstruation and fertility in 65 patients with varying degrees of IUAs at Ramathibodi Hospital.

MATERIAL AND METHOD

Hysteroscopic lysis of IUAs was performed on 65 consecutive patients at Ramathibodi Hospital between August 1994 and December 1996. All 65 patients were diagnosed as having IUAs by hysteroscopy according to the American Fertility Society classification of IUAs(2). The age of the patients ranged from 18-39 years and the mean age was 29.5±1.9 years. Operative hysteroscopies were performed mostly during the follicular phase of the cycle under general anesthesia using propofol as total intravenous anesthesia (TIVA). A rigid 26 mm hysteroscope (Karl Storz GbmH & Co., Tuttlingen, Germany) was used. The uterine cavity was distended for visualization using 1.5 per cent glycine solution at an insufflation pressure of 100 mm Hg with the fluid balance being carefully monitored. Adhesions were lysed hysteroscopically with various instruments such as scissors, biopsy forceps, electrosurgery using either a monopolar probe or a resectoscope. Adhesiolysis was continued until a normal panoramic view of the endometrial cavity was noted and both tubal ostia were visualized. Postoperative therapy consisted of conjugated estrogen 2.5 mg/day for 25 days, with medroxyprogesterone acetate 10 mg/day added on days 20-25 and an intrauterine device was inserted for 3 months after the operation to prevent reformation of adhesions when adhesions were moderate or severe. Prophylactic doxycycline 100 mg twice a day was given for 7 days in all patients.

RESULTS

Sixty-five cases of IUAs were reported. The characteristic clinical pictures were amenorrhea or hypomenorrhea accompanied by periodic lower abdominal pain in 50 patients, 5 complained of RPL and infertility in 45 patients. Of the 65 patients studied, 29 had mild adhesions, 26 had moderate adhesions, and 10 had severe adhesions. Adhesions were lysed with hysteroscopic scissors in 25, with biopsy forceps through hysteroscope in 10, with electrosurgery using a monopolar probe in 22 patients, and with resectoscope in 8 patients. The mean duration of the procedure was 15±2.1 minutes (range 10-45 minutes). The mean follow-up was 12±1.4 months (range 6-18 months). Of the 44 patients who originally presented with secondary amenorrhea, 40 (90.9%) had normal menses, 4 (9.1%) had hypomenorrhea. Of the 6 patients who had hypomenorrhea, 5 (83.3%) had normal menses. Cyclic abdominal pain disappeared after treatment in all patients. Of the 45 patients with IUAs and infertility, 16 (35.6%) conceived. Two (20%) of the infertile patients with initially severe adhesions conceived. Of the 5 patients with RPL treated, one delivered a full term baby and the other one delivered a premature baby at 29 weeks of gestation. All 18 patients who delivered, had live births. Adhesion

reformation was absent in patients with initially mild and moderate adhesion but occurred in 2 out of 10 (20%) patients with severe adhesions. These two patients initially suffered from secondary amenorrhea but reported hypomenorrhea after surgery. Both of them had tuberculosis of the genital tract. All 65 patients were discharged a few hours after the operation. There were no serious complications attributed to this study.

DISCUSSION

Intrauterine adhesions may be a significant cause of infertility and RPL, therefore, hysteroscopic lysis of IUAs is necessary in these patients. Hysteroscopy is the ideal method to make the diagnosis of IUA, and the safest, least traumatic, and most precise method of treating IUA. Under direct vision, the surgeon can lyse all the adhesions and not traumatize normal endometrium.

The methods used to divide these adhesions are varied. In our series adhesions were lysed with hysteroscopic scissors in 25, with biopsy forceps through hysteroscope in 10, with electrosurgery using a monopolar probe in 22, and with a resectoscope in 8 patients.

Valle et al[3] reported one hundred and sixty-nine patients with IUAs complaining of menstrual irregularities, of whom 43 (23.0%) had amenorrhea, 14 (7.5%) had oligomenorrhea, and 112 (59.9%) had hypomenorrhea. Normal menstruation was restored in 88.2 per cent of patients who had menstrual abnormalities including amenorrhea, oligomenorrhea, and hypomenorrhea. Pabucca et al[4] reported that six (67%) of the nine patients with amenorrhea had normal menstrual flow after adhesiolysis. Adhesion reformation rates were 10 per cent and 60 per cent in patients with initially moderate and severe adhesions, respectively.

Our results with hysteroscopic lysis of IUAs are encouraging. Most of the patients with amenorrhea or hypomenorrhea reported improvement after surgery. Normal menstruation was restored in 90.9 per cent of patients with amenorrhea and 83.3 per cent of patients with hypomenorrhea. Adhesion reformation was absent in patients with initially mild and moderate adhesion but occurred in 2 out of 10 (20%) patients with severe adhesions. Both of them, initially suffered from secondary amenorrhea but reported hypomenorrhea after surgery, had genital tuberculosis.

Sugimoto[5] reported a viable birth rate in 40 per cent and 20 per cent of patients with RPL and infertility respectively. Goldenberg et al[6] reported that the pregnancy rate in infertile women following hysteroscopic adhesiolysis was 48 per cent. The pregnancy wastage in women with RPL who underwent hysteroscopic adhesiolysis decreased postoperatively from 86.5 to 42.8 per cent.

We achieved a pregnancy rate of 35.6 per cent after hysteroscopic lysis of IUAs in 45 infertile women. Two (20%) of the infertile patients with initially severe adhesions conceived. However, the results of pregnancy cannot be totally assessed. Most of the patients who desired pregnancy are either still under treatment or have other additional factors complicating infertility. Our series demonstrated that hysteroscopic removal of intrauterire adhesions in 5 patients with RPL led to 1 term delivery, and 1 premature delivery at 29 weeks of gestation.

Potential complications of hysteroscopic lysis of IUAs are uterine perforation, hemorrhage, infection and a rare complication of spontaneous uterine rupture with resultant hemorrhage during pregnancy after hysteroscopically surgical treatment of intrauterine adhesions[7]. There were no serious complications occurring in all 65 procedures.

SUMMRAY

Hysteroscopy is a good method of choice to diagnose, classify, treat, and follow-up patients with intrauterine adhesions. Hysteroscopic adhesiolysis is a safe, effective procedure and benefit patients suffering from infertility, amenorrhea, hypomenorrhea and/or periodic lower abdominal pain.

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ภาวะการเจริญพันธุ์ภายหลังการผ่าตัดพังผืดภายในโพรงมดลูกผ่านกล้อง hysteroscope: รายงานผลการรักษาผู้ป่วยที่โรงพยาบาลรามาธิบดี 65 ราย

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ได้รายงานผลการรักษาผู้ป่วยจำนวน 65 รายที่ได้รับการผ่าตัดพังผืดภายในโพรงมดลูกผ่านกล้อง hysteroscope ที่โรงพยาบาลรามาธิบดี ระหว่างเดือน สิงหาคม พ.ศ. 2537 – ธันวาคม พ.ศ. 2539 อายุเฉลี่ยของผู้ป่วย 29.5±1.9 ปี (ค่าพิสัย 18–39 ปี) เป็นผู้ป่วยที่มีปัญหาเรื่องไม่มีประจำเดือน หรือประจำเดือนมาน้อยร่วมกับมีอาการปวดท้องน้อยเป็นรอบ 50 ราย recurrent pregnancy loss 5 ราย มีบุตรยาก 45 ราย ผู้ป่วยทั้งหมด 65 ราย มี mild adhesions 29 ราย moderate adhesions 26 ราย และ severe adhesions 10 ราย ได้รับการผ่าตัดผ่านกล้อง hysteroscope ด้วยกรรไกร 25 ราย biopsy forceps 10 ราย monopolar probe 22 ราย และ resectoscope 8 ราย เวลาเฉลี่ยที่ใช้ในการผ่าตัด 15±2.1 นาที (ค่าพิสัย 10–45 นาที) ระยะติดตามผลการรักษาเฉลี่ย 12±1.4 เดือน (ค่าพิสัย 6–18 เดือน) ผู้ป่วยที่มีปัญหาเรื่องไม่มีประจำเดือน 44 ราย ภายหลังการผ่าตัดพบว่า ประจำเดือนกลับมาเป็นปกติจำนวน 40 (90.9%) ราย และ 4 (9.1%) รายมีประจำเดือนภายหลังการผ่าตัดแต่มีปริมาณน้อย (hypomenorrhea) ผู้ป่วยที่มีปัญหาเรื่องประจำเดือนมาน้อย 6 ราย หลังการผ่าตัดประจำเดือนกลับมาเป็นปกติ 5 (83.3%) ราย อาการปวดท้องน้อยเป็นรอบหายเป็นปกติทุกราย ผู้ป่วย 45 ราย ที่มีบุตรยากตั้งครรภ์หลังการผ่าตัด 16 (35.6%) ราย ผู้ป่วยที่มีบุตรยากและมี severe adhesions 10 ราย สามารถตั้งครรภ์หลังการผ่าตัด 2 (20%) ราย ผู้ป่วยที่มีปัญหา recurrent pregnancy loss 5 ราย หลังการผ่าตัด สามารถตั้งครรภ์และให้การคลอดบุตรครบกำหนด 1 ราย อีก 1 รายคลอดบุตรก่อนกำหนดขณะตั้งครรภ์ได้ 29 สัปดาห์ เด็กทารกที่คลอดภายหลังการผ่าตัดทั้งหมด 18 คน คลอดมีชีวิตทุกคน ไม่พบการเกิดซ้ำของพังผืดในโพรงมดลูกภายหลังการผ่าตัดในกลุ่มผู้ป่วยที่มี mild และ moderate adhesions ผู้ป่วยที่มี severe adhesions จำนวน 10 ราย ภายหลังการผ่าตัดพบการเกิดซ้ำของพังผืดในโพรงมดลูกจำนวน 2 ราย ผู้ป่วยทั้ง 2 ราย พบการติดเชื้อวัณโรคของระบบอวัยวะสืบพันธุ์สตรี ผู้ป่วยทั้ง 65 รายสามารถกลับบ้านได้ในวันที่ทำการผ่าตัดและไม่พบภาวะแทรกซ้อนใดๆ จากการผ่าตัด

สรุป การผ่าตัดพังผืดภายในโพรงมดลูกผ่านกล้อง hysteroscope เป็นการผ่าตัดที่ปลอดภัย ผู้ป่วยที่มีปัญหาเรื่องประจำเดือนมาผิดปกติและ/หรือมีบุตรยาก ที่มีสาเหตุมาจากพังผืดภายในโพรงมดลูก พบว่าภายหลังการผ่าตัดพังผืดผ่านกล้อง ผู้ป่วยส่วนใหญ่จะมีประจำเดือนกลับมาเป็นปกติ และภาวะการเจริญพันธุ์ภายหลังการผ่าตัดอยู่ในเกณฑ์ดี

คำสำคัญ : พังผืดภายในโพรงมดลูก, การผ่าตัดผ่านกล้อง, ภาวะการเจริญพันธุ์

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