INTRAUTERINE ADHESIONS AT THE UNIVERSITY OF MAIDUGURI TEACHING HOSPITAL, MAIDUGURI, NIGERIA: A 3 YEARS REVIEW

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ABSTRACT.

Context; Menstrual abnormalities and infertility are leading gynaecological complaints which can be caused by intrauterine adhesion, a preventable condition. Hence, the need to know the common aetiological factors in our environment.

Objective; To determine the mode of presentation, aetiological factors and outcome of treatment of intrauterine adhesions in our institution

Study design, setting; A retrospective analysis of all cases of intrauterine adhesions at the university of Maiduguri teaching hospital from 1st January 2008 to 31st December 2010. The case records of 22 patients were analysed.

Main outcome measure; Aetiological factors and outcome of treatment in regard to restoration of normal menses and conception.

Results; Menstrual disorder was the most common complaint (90.9%) followed by infertility (86.4%). The most common aetiologic factor was C-section (10; 45.5) followed by abortion (8; 36.3). All patients were treated by adhesiolysis, Foleys catheter insertion and hormonal therapy for three cycles. Restoration of normal menstruation was achieved in 45.5% of cases and 27.3% conceived during the follow up period. No change in menstrual pattern was recorded in 36.4% of cases.

Conclusion; C-section as a cause of intrauterine adhesion may be on the increase and subclinical infection is an important inciting factor.

Keywords; Intrauterine adhesions, aetiological factors, reproductive outcome, Maiduguri.

INTRODUCTION

Intrauterine adhesions also known as Asherman's syndrome first described in 1894 by in 1894 and further characterized by the gynecologist Joseph Asherman in 1948[1] is a condition characterized by the presence of adhesions within the uterine cavity. Trauma to the basal layer most frequently after evacuation of a recently pregnant uterus, following a missed or incomplete miscarriage, elective abortion or birth to remove retained products of conception leads to the development of intrauterine adhesions that can obliterate the cavity to varying degrees in over 90% of the cases. Asherman's syndrome can also result from Cesarean sections, myomectomy and pelvic irradiation. Puerperal sepsis, schistosomiasis and genital tuberculosis are significant causes of intrauterine adhesions in the developing world and can result in total obliteration of the uterine cavity which is difficult to treat[2,3]. Menstrual abnormalities, recurrent pregnancy loss and infertility are the usual presenting features of asherman's syndrome[4]. While sonohysterography and hysterosalpingography are useful as screening tests for intra-uterine adhesions, hysteroscopy remains the mainstay of diagnosis and treatment (hysteroscopic lysis of adhesions with scissors, electrosurgery, or laser)[3,4]. Hysteroscopy is however not widely available and traditional blind division of adhesions is still practiced. Postoperative mechanical distention of the endometrial cavity and hormonal treatment to facilitate endometrial regrowth appear to decrease the high rate of adhesion reformation.

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Where available antiadhesive barriers are also used to prevent the recurrence of intra-uterine adhesions[2]. Spontaneous abortion, preterm delivery, intrauterine growth restriction, placenta accrete or praevia, and uterine rupture are potential pregnancy complications after the treatment of intra-uterine adhesions[2,4]. Restoration of menstruation is highly successful (more than 90%), and pregnancy rates around 50-60% with live birth rates around 40-50% can be achieved[3].

OBJECTIVE

To determine the mode of presentation, aetiological factors and outcome of treatment of intrauterine adhesion at the university of Maiduguri teaching hospital, Nigeria.

MATERIALS AND METHODS

This is a retrospective analysis of Asherman's Syndrome in the University of Maiduguri Teaching Hospital from 1st January 2008 to 31st December 2010. The case notes of patients diagnosed to have Asherman's Syndrome on hysterosalpingogram over the 3 years period were reviewed and information regarding the symptoms, possible aetiological factors, HSG findings and outcome of treatment was retrieved. Patients with incomplete records were excluded from the study. Data was analyzed by simple descriptive statistic.

RESULTS

There were 32 cases of asherman's syndrome managed over the three year period, however 22 patients fulfilled the study criteria and their data was analysed.The age of the patients ranged from 21years to 43years (mean; 31.6yrs) and parity 0-4(mean;1.1). Menstrual disorder was the most common complaint (90.9%) followed by infertility (86.4%) as shown in table I. The most common aetiologic factor was C-section (10; 45.5) followed by abortion (8; 36.3) as illustrated in tableII. Majority of patients had only intrauterine adhesions (13; 59.1%) while 7; 31.8% had intrauterine and cervical adhesions and 2; 9.1% had only cervical adhesions. All patients had blind adhesiolysis. A paediatric foley's catheter was left insitu for ten days. A 14 days course of broad spectrum antibiotics and combined oral contraceptive pills for three cycles was given to all patients. Restoration of normal menstruation was achieved in 45.5% of cases and 27.3% conceived during the follow up period. No change in menstrual pattern was recorded in 36.4% of cases (tableIII).

TABLE I:
SYMPTOMATOLOGY

Symptom	N (%)
Infertility	19(86.4)
Amenorrhea	9 (40.9)
Hypomenorrhea	6 (27.3)
Oligomenorrhea	5 (22.7)
Recurrent pregnancy loss	1 (4.5)

*percentage >100 because of multiple symptoms

TABLE II:
AETIOLOGICAL FACTORS

Factor	N (%)
C -section	10(45.5)
Abortion	8 (36.3)
Puerperal sepsis	4 (18.2)
PROM	2 (9.1)
Myomectomy	1 (4.5)

*percentage >100 because of multiple aetiologic factors in some cases

TABLE III:
OUTCOME OF TREATMENT

Outcome	N (%)
Restoration of menses	10 (45.5)
Conception	6 (27.3)
No change in menses	8 (36.4)
Amenorrhea	4
Hypomenorrhea	2
Oligomenorrhea	2

*percentage >100 because of multiple outcome in some patients

DISCUSSION

The relationship between Asherman's Syndrome, menstrual irregularity and infertility was first described by asherman[1] and confirmed subsequently by many studies[5,6]. It is therefore not surprising that menstrual irregularity (90.9%) and infertility (86.4%) are the leading complaints among the patients in this study. Ninety percent of patients in this study had menstrual abnormalities similar to 93% reported in Benin[7]. In a similar study in Lagos, all the patients had menstrual irregularity[8]. Infertility being the second most common complaint after menstrual disorder is in keeping with the result of other studies[5,6,9]. All these study further strenghthen the relationship between Asherman's Syndrome, infertility and abnormal menses.

All cases in this study were diagnosed by hysterosalphingogram as hysteroscopy which is the gold standard for diagnosis and treatment [3,4] is not available in our centre.

Several studies have reported curettage of a recently pregnant uterus for induced or spontaneous abortion as the leading cause of Ashermans syndrome[5,6,7,8,10]. This has been attributed to the high incidence of illegal abortion in nigeria[11,12]. Abortion was the second leading cause of Asherman's Syndrome in this review seen in 36.3% of patients. This may be due to the low incidence of illegal abortion in the conservative north and wide spread use of manual vacuum aspiration. In this study, however, c-section is the leading identifiable cause of Asherman's syndrome as seen in 45.5%. This is higher than the 28% reported in Lagos[8], 22% in Enugu[11] and 32% reported by an international patient support group[10]. This finding is rather worrisome as studies have reported increasing rate of caesarean sections even in developing countries consistent with the global change in obstetric practice[13,14,15]. This may ultimately lead to increase in incidence of Asherman's syndrome. As was reported in Lagos, all the c-sections in this study were done for prolonged labour implicating subclinical infection as a factor in developing Asherman's syndrome[16]. All the c-sections were done as emergencies and probably by less experienced doctors as none was done in a tertiary centre. Other aetiological factors seen in this study (PROM;9.1% , puerperal sepsis;18.2%) further implicates infection as an inciting agent.

All cases were treated by blind adhesiolysis, insertion of foleys catheter and hormonal therapy for 3 cycles to promote endometrial regeneration. Restoration of normal menses was achieved in 45.5% of patients which is similar to 47.9% achieved in Abuja[17] but lower than 81.4% achieved in Benin[7]. This may be explained by the fact that in the Benin study patients had multiple adhesiolysis. The conception rate of 27.3% achieved in this study is higher than 11.3% reported in Abuja[17], but lower than 33.9% reported in Benin[7]. These results are rather poor compared to restoration of normal menses of over 90% and conception rate 50-60% reported after hysteroscopic adhesiolysis[3,5,9,11]. There was no change in menstrual pattern in 36.4% of patients similar to 32% reported in Lagos[8] but lower than 52% seen in Abuja[17].

The poor outcome of treatment using blind adhesiolysis calls for the need to make hysteroscopy widely available in developing countries in order to improve the outcome of treatment of ashermans syndrome.

Although the sample size in this study is small, there is need to recognize C- section as a cause of Asherman's syndrome and put in place measures of reducing caesarean birth.

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