INTRODUCTION

Intrauterine adhesions (IUAs) were initially recognized by *Fritisch, (1894). Asherman, (1948)* reported "Amenorrhea traumatica or atretica" as amenorrhea secondary to intrauterine adhesions. *Asherman* assessed the clinical characteristics and therapeutic possibilities and made conjectures about their causes and pathogenesis (*Valle, 1993).*

The most important factor in the development of IUAs is traumatic curettage or manipulation of the endometrium during the postpartum or post-abortal period, especially at 1-4 weeks following termination of pregnancy (*Valle, 1993).*

History of curettage of a recently pregnant uterus associated with subsequent amenorrhea or hypomenorrhea should alert the physician to the possible existence of intrauterine adhesions. Most IUAs (over 90%) develop following a pregnancy-related curettage (*Schenker and Margalioth, 1982).* It has been found that adhesions occur more often after curettage for missed abortion than curettage for an incomplete abortion. About one third of intrauterine adhesions developed following curettage for evacuation of an incomplete spontaneous abortion, and another third after elective termination of pregnancy (*Hamou et al., 1980).*

A delivery by cesarean section rarely causes intrauterine adhesions, but if IUAs do develop following cesarean section, they are the result of inadvertent sutures to opposing uterine walls. Although infrequent, infection

alone may cause intrauterine adhesions, and more often it follows tuberculous endometritis (*Klein and Garcia, 1973).* IUAs have been also observed after metroplasty, submucous myomectomy and intrauterine device use (*Corson, 1992).*

A hysterogram showing persistent uterine defects with sharply delineated borders increases the suspicion. However, the most precise diagnosis of the presence and extent of these adhesions can be made only by direct observation of the uterine cavity by hysteroscopy (*Valle,* 1993). Hysterographic findings may be equivocal or misinterpreted, as noted by *Sweeny, (1958)* and *Foix et al., (1966).* The type and degree of adhesions can not be established with certainty by hysterography. It has been found that in a series of hysterograms, 80 cases were interpreted as revealing severe involvement. Hysteroscopy revealed mild involvement for 4 cases, and 23 others revealed moderate adhesions. The findings of the remaining 53 cases were the same as the hysterographic findings. Of the 54 hysterograms showing minimal to moderate uterine involvement, all but 5 revealed the same information as the X-ray interpretation (*March, 1986).*

Amenorrhea, hypomenorrhea and repeated abortions are the main symptoms of IUAs. Over 75% of women with moderate to severe adhesions will have either amenorrhea or hypomenorrhea. Cyclic abdominal pain at the time of expected menses and the failure to menstruate may indicate atretic traumatic amenorrhea (*Asherman, 1948*). Minor degrees of IUAs may have no symptoms or may present with secondary infertility or dysmenorrhea (*Sugimoto, 1978).*

Advances in hysteroscopy, however, have enabled us not only to confirm the presence of adhesions, but also to permit a rough estimate of the histology which is helpful enough to suggest the adherent intensity of the tissue (*Sugimoto, 1978).*

Blind manipulation to divide IUAs has not been satisfactory for restoring normal uterine architecture, and the reproductive performance of patients treated with such methods has remained disappointing (*Valle, 1996).*

Hysteroscopy, today, is the accepted method of evaluation and treatment of this condition. Although extensive connective tissue adhesions have been difficult to treatment, even with hysteroscopy, the visual approach to these adhesions has improved treatment and decreased the risk of uterine damage or creation of new adhesions (*Valle, 1983).* Hysteroscopic treatment of intrauterine adhesions consists of dividing the adhesions mechanically or utilizing energy modalities such as electrosurgery or fiberoptic lasers (*Valle*, 1993). Concomitant laparoscopy is performed in patients with extensive intrauterine adhesions and should be added routinely when tubal blockage is diagnosed by hysterosalpingography, regardless of the degree of uterine cavity occlusion (*Valle, 1996).*

The universal incidence of IUAs is steadily increasing. It appears to be particularly prevalent in Israel, Greece, and South America. Several extensive studies delineating different aspects of the syndrome have been universally published. Detailed documents have been published in Israel, Greece, France, Denmark, South America, the United States and Japan (*Schenker and Margalioth, 1982).*

In Egypt the true incidence of IUAs is not well studied. *Nossier, (1993)* reported an incidence of (6.7%) before, and (16.7%) after dilatation and curettage for missed abortion. *Kafafi, (1994)* reported an incidence of 12% among women suffering from primary infertility, an incidence of 33% among women suffering from secondary infertility and an incidence of 13% suffering from repeated pregnancy wastage.