Introduction

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Menorrhagia means excessively heavy menstruation and has been defined from population studies as a measured menstrual blood loss (MBL) of more than 80ml/cycle ***(Halberg et al, 1966).*** It was estimated that at least 25-30% of women complain of menorrhagia ***(Coulter, 1994).*** Menorrhagia may be caused by local pelvic pathologies, such as fibroids, adenomyosis, endometriosis, or endometrial polyps, systemic disorders such as, inherited clotting deficiencies, thrombocytopenia, chronic liver failure or hypothyroidism, and iatrogenic causes such as, the intrauterine contraceptive device (IUCD), or anticoagulant therapy ***(Fraser, 1994).*** However 80% of women complaining of menorrhagia will be diagnosed by exclusion and described as dysfunctional uterine bleeding ***(Cameron, 1989).***

Some of women complain of refractory menorrhagia which is a complaint of the woman and her physician that perceived excessive MBL is not responding to treatment. Woman should be diagnosed as having refractory menorrhagia when she fails to respond to often repeated medical therapies with normal or hormone related changes in the endometrium over a period of 6 month, with a drop in hemoglobin level ***(Sheth and Allahbdia, 1999).***

Treatment of menorrhagia aims at improving the quality of life in women who are unable to cope with excessive menstrual bleeding.

Management of menorrhagia secondary to any pathological disorder should be directed at treatment of the primary cause ***(Fraser,1994).***

Dilatation and curettage is the most commonly used temporarily effective surgical treatment for menorrhagia. However, Hysterectomy is the

most effective treatment for both refractory menorrhagia and dysmenorrhea. It is often regarded as the last resort when other treatments of menorrhagia has failed ***(Sculpher et aL, 1996).*** Nowadays there is limitation of the use of hysterectomy in treatment of menorrhagia because it has been shown that in about half of the cases of menorrhagia the uterus removed at hysterectomy is histologically normal ***(Magos, 1990)***. Also, because hysterectomy is associated with high incidence of post-operative sequels and high mortality rate . Also it is not a preferred solution for women want to preserve their uteri ***(Chapman, 2001).***

Medical treatment is the first line of treatment of menorrhagia but it can not cure menorrhagia and need to be continued for long time to prevent recurrence ***(Shaw, 1994).***

Gondotropine releasing hormone analogue (GnRH-a) are highly effective in producing amenorrhea in the presence of fibroid, endometriosis and have been used in sever DUB ***(Thomas et al., 1996).*** but menopausal symptoms and rapid recurrence of symptoms after its stoppage limited its usage ***(Garry et al., 1996).***

It is well known that endometrial ablation with or without resection of pathology is a safe procedure with an overall complication rate of 1.25-4.58% ***(Erian, 1994)*** usually it is followed by amenorrhea rates 26 to 60% with first generation endometrial ablation techniques up to 80% with second generation endometrial ablation techniques. But menorrhagia persists in about one quarter of women, and the probability of having hysterectomy four years after ablation has been estimated 12%. Also fertility may be altered ***(Lethaby et al$_r$ 2000 d) .***

Bilateral uterine artery embolization and ligation were used as a conservative treatment for symptomatic fibroids or refractory menorrhagia in women want to preserve their uteri ***(Machan and Martin, 2001).*** Most patients experiencing relief of symptoms and satisfaction with procedure ***(Floridon et al,2001),*** however postembolization syndrome, the time required to perform the procedure, radiation exposure and hazards of anesthesia have limited the_widespread application of these techniques ***(Kelleher and Braude,1999)***

Levonorgesrel intrauterine system (LNG-IUS) is an effective alternative to hysterectomy and has reduced the need for surgical treatment in United Kingdom ***(Barringtong et al.,1997).***

This controversy about the ideal conservative treatment of refractory menorrhagia, push us to evaluate the Levonorgestrel intrauterine device as an ideal conservative treatment of refractory menorrhagia.