

STUDY ON THE CONTROL OF
MENORRHAGIA
IN IUDS USERS

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INTRODUCTION

INTRODUCTION

The intrauterine contraceptive device (IUCD) is the ideal method for women who wish to practice birth control, the advantages are particularly appropriate for family planning programs in developing nations in which a majority of the population is poorly educated (Teitze, 1966¹¹⁸).

IUDs provide long term protection against pregnancy, they require only a single decision by the patient and only one procedure by the physician (Ralph and Benson, 1976⁹⁹).

The method does not require the repeated administration of a drug, ensures recovery in fertility soon after removal, does not produce systemic side effects and inexpensive (Teitze, 1970¹¹⁹, Hefnawi, 1979⁴⁸).

IUDs are suitable for patients having contraindications for pills or those who do not wish to use oral contraceptive and object the use of vaginal diaphragm. (John Hawkins, 1975,⁶⁵). The ideal intrauterine contraceptive device has not been developed to the current time.

Bleeding, pain, expulsion, perforation, pregnancy and an increased risk of pelvic inflammatory disease are still the major complications of this method. Of these complications bleeding is the one that most commonly results in removal of the device (Guillebaud and Bonnar, 1978³⁹).

Bleeding with IUCD constitutes a personal inconvenience to many users, a social problem in certain cultural settings, and a potential cause of anaemia (Rybo, G., 1978¹⁰⁵). In British studies, the percentage of women using copper 7 who experienced menorrhagia was about 25 percent, compared with 50 to 60 percent for women using the Lippes Loop and 10 to 15 percent for the entire group before insertion (Guillebaud, et al., 1976⁴⁰ and Hingorani, 1971⁵⁶).

From a medical point of view, the most serious effect of increased menstrual bleeding is the increased danger of anaemia. Several studies of well-nourished women in developed countries, where about 5 to 25 percent of women of reproductive age may be anaemic, (Hallberg and Nilsson 1966⁴², Rybo, G., 1978¹⁰⁵), have shown that plasma ferritin and hemoglobin levels decline after IUCD insertion (Guillebaud and Bonnar 1978³⁹), although others have shown no effect (Larsson et al., 1975⁷⁴, Liedholm et al., 1975⁷⁶).

In developing countries at least half the women of reproductive age are likely to be anaemic (Hefnawi et al., 1975⁵¹) their condition often aggravated by poor nutrition, parasitic disease, and frequent pregnancies and lactation (Gallegos, et al., 1978³² and Hingorani, 1971⁵⁶)

REVIEW OF LITERATURE

REVIEW OF LITERATURE

TYPES OF BLEEDING WITH IUCD

The bleeding problems with IUCD takes several clinical forms. Tauber, Kloppel, and Goodpasture 1981¹¹⁶, mentioned that menorrhagia is one of the most common complains of women wearing intra-uterine contraceptive devices. George, Huggins, 1981³³, Hefnawi et al., 1977⁵², Guillebaud and Bonnar 1978³⁹ have confirmed the fact that menses may be heavier than expected, and the length of menstruation may be prolonged.

Another form of menstrual irregularity associated with IUCD is an increase in intermenstrual bleeding, also called mid cycle bleeding (Rodriguez, G. et al. 1976¹⁰²). Jeffcoat, 1975⁶⁴, George and Huggins, 1981³³, estimated the incidence of intermenstrual bleeding and menorrhagia as 50 percent among IUCD users. They are mostly seen during the first few days and months and tend to disappear later. All these forms of bleeding will occur in most women in the first two months after insertion and will persist in up to 40 percent. (Davis, H.J., 1972²⁷).

Late onset bleeding occur after insertion of IUCD by interval which may be several years (Human reproduction⁶¹).

Excessive, prolonged or irregular bleeding often associated with pain is the most frequent symptom that leads to discontinuation of IUCD use (Tietze, and Lewit, 1970¹¹⁹, Guillebaud, Bonnar, 1978³⁹) 4-12 percent of IUDs were removed on account of bleeding, pain or both (Hefnawi F. 1979⁴⁸). Removal rates of IUCD for bleeding and pain may vary with the parity of the users, their willingness to tolerate side effects and availability of alternative methods (Hefnawi et al. 1975⁵¹). The attitude of the patient and physician towards abnormal bleeding as well as the type of device will influence the removal rate (Maker and Gray, 1978⁸⁵).

Quantification of blood loss and IUCD

Normal menstrual blood loss by healthy women averages about 35 ml (Isreal et al., 1974⁶², Guttorm, 1971³⁵, and Yacout 1976¹²⁹).

In users of non medicated intrauterine devices e.g. the Lippes loop, Dalkon shield, Saf-T-Coil, or Birnberg Baw, menstrual blood loss measured at various intervals after insertion is approximately doubled from normal or pre-insertion levels, with average increases ranging from about 36 to 50 ml. (Callegos, AJ, 1978³², Guillebaud and Bonnar, 1978³⁹).

With copper 7 and copper 1 devices, menstrual bleeding is also increased, but to a lesser amount. Most studies show post-insertion increases of 10 to 30ml or about 50 percent (Larsson, Hamberger and Rybo, 1975⁷⁴).

Subir and Shaw 1981¹¹⁴, mentioned that users of non medicated intrauterine devices lose 70 to 100 ml whereas users of copper IUCD lose 40 to 60 ml each cycle. The little increase in bleeding with copper devices as compared with the Lippes loop seems to be caused by the smaller surface area of the device rather than the addition of copper (Hefnawi, Yacot, 1977⁵²). Lippes et al., 1973⁷⁸, reported that there was more bleeding associated with the Lippes A when it carried 200 sq.mm. of metallic copper than when the loop A was used alone.

In general, studies with both unmedicated and medicated devices suggested that the amount of menstrual bleeding in individual women with IUCD does not change greatly over time even though a women's subjective impression as she becomes accustomed to the new pattern may eventually be of decline (Rybo, G, 1978¹⁰⁵).

Evidence also suggests that women who report heavier than normal bleeding before IUCD insertion experience a smaller increase in bleeding after IUCD and even some cases a decrease (Larsson, Hambergs and Rybo, 1975⁷⁴). This suggested that heavy bleeding should not be automatically regarded as a contra-indication to IUCD use.

Unlike the unmedicated or copper IUCD, progestogen-releasing devices reduce the volume of menstrual bleeding below pre-insertion levels and this reduction may continue gradually over several months (Rybo and Berquist, 1978¹⁰⁶). Guillebaud, 1977³⁶).

Fouad Hefnawi's study in Egypt of a progesterone releasing u-coil showed total monthly menstrual bleeding reduced to less than 5 ml after three months (Hefnawi et al., 1977⁵²).

In nulliparous patients both copper 7 and the small Dalkon shield were associated with equal levels of increased bleeding, among patients of parity 1, 2 and 3 the greatest magnitude of blood loss will be experienced in women fitted with Lippes loop. in higher parities of 4 or more the Lippes loop and the Dalkon shield are associated with a similar amount of increased bleeding. Copper 7 shows a lower amount of bleeding in all parities. (Guillebaud et al., 1976⁴⁰)

PHYSIOLOGIC VARIABLES AFFECTING THE MAGNITUDE
OF MENSTRUAL BLOOD LOSS

1. Age:

Many authors have studied the effect of age on the normal magnitude of menstrual blood loss (Hallberg and Nilsson 1966⁴², Cole et al., 1971²⁴) but all have concluded that age per se has little or no independent influence on menstrual blood loss.

2. Parity:

Hefnawi et al. 1980⁵⁰, revealed a significant rise of menstrual blood loss with parity, Hallberg and Nilsson 1966⁴²; Liedholm et al., 1975⁷⁶, concluded that parous women suffered heavier menstrual blood loss than nulliparous women.

3. Menarche:

Rybo.G., 1966¹⁰⁴, found that women with early menarche and women with late menarche had higher means of menstrual blood loss than women with menarche between 12 and 15 years.

4. Weight and height:

Cole et al., 1971²⁴, found that no relation between the magnitude of menstrual blood loss and height, however, maternal weight had a statistically significant correlation to menstrual blood loss, with heavy women having heavier menstrual flow-finding that agrees with finding of Hefnawi et al., 1980⁵⁰

5. Blood pressure:

Hefnawi et al., 1980⁵⁰ . found that menstrual blood loss was directly proportional to variations in systolic blood pressure but that diastolic blood pressure changes had no influence.

6. Position and size of the uterus:

Cole et al., 1971²⁴, Hefnawi et al. 1980⁵⁰ , reported that menstrual blood loss in women with small and anteverted uteri was less than that in women with large retroverted or midposition uteri.

7. Hematologic indices:

In general, women with lower values on hematologic indices (indicating the presence of anaemi) have higher menstrual blood losses. (Hallberg et al. 1966⁴², Hefnawi et al., 1980⁵⁰).