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ORIGINAL RESEARCH ARTICLE

Prescription pattern in Dysfunctional Uterine Bleeding

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ABSTRACT

Dysfunctional uterine bleeding (DUB) is defined as abnormal uterine bleeding caused by hormonal mechanism. This study was aimed to find out the drugs prescribed for DUB in the tertiary care hospital. A cross sectional observational study was planned out. The protocol was approved by Institutional Human Ethics Committee. 100 was the estimated sample size. Details on drug history were recorded using case record form. The collected data was analysed statistically. In this the most commonly used drug was NSAIDS (61%). Others have been treated with progesterone derivative, combined oral contraceptive pills (OCP) or hysterectomy. Among the NSAIDS commonly used was Mafenamic acid alone or in combination with Tranexamic acid or Dicyclomine. Among the progesterone 64% of patients were treated with medroxy progesterone and 36% of patients were treated with norethisterone.

Key words: Dysfunctional uterine bleeding, NSAIDS, progesterone derivative, combined oral contraceptive pills (OCP).

INTRODUCTION

Dysfunctional uterine bleeding (DUB) is defined as abnormal uterine bleeding caused by hormonal mechanism. The diagnosis of DUB should be made only when other organic and structural causes for abnormal vaginal bleeding have been ruled out. Approximately 90% of DUB results from anovulation, and 10% occur with ovulatory cycles. DUB is most common near the beginning and end of a women's reproductive life, but may occur at any time. In the first 18 months after menarche, the immature hypothalamic pituitary axis may fail to respond to estrogen and progesterone, resulting in anovulation. In obese women, the non-ovarian endogenous estrogen production may upset the normal menstrual cycle. As menopause approaches, decrease in hormone levels or unresponsiveness to hormone may lead to anovulatory DUB.

The primary goal of treatment of DUB is to convert the proliferative endometrium into secretory endometrium. This can be achieved by administering a progestational agent ^[1]. A variety of drugs are available for DUB including NSAID (Non steroidal anti inflammatory drugs), conjugated estrogen and progesterone ^[2]. Typically oral conjugated estrogens 2.5 mg 4 times a day can be given until bleeding stops and then switch onto 2.5mg per day for 25 days, during the last 10 days of estrogen therapy medroxy progesterone acetate 10 mg per day can be given ^[3]. Hormone therapy for DUB involves oral contraceptives or progesterone therapy to regulate bleeding patterns. Treatment depends on the patient's age, severity and timing of bleeding ^[4]. So this study was aimed to find out the drugs prescribed for DUB in the tertiary care hospital.

METHODOLOGY

A descriptive study was planned out. The protocol was approved by Institutional Human Ethics Committee. 100 was the estimated sample size. All outpatients diagnosed with DUB who was attending Obstetrics and Gynecology was included. The data was collected retrospectively. Details on drug history were recorded using case record form. Personal details like, name, Date of Birth, telephone number and address were not taken. Confidentiality of patient details was maintained. The collected data was analysed statistically. **RESULTS**

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The charts of 100 DUB patients were taken for the study. In this the most commonly used drug was NSAIDS (61%). Others have been treated with progesterone derivative, combined oral contraceptive pills (OCP) or hysterectomy (**Figure 1**).

Among the NSAIDS commonly used was Mafenamic acid alone or in combination with Tranexamic acid or Dicyclomine (**Figure 2**).

Among the progesterone 64% of patients were treated with medroxy progesterone and 36% of patients were treated with norethisterone (**Figure 3**).

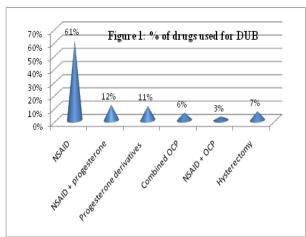


Figure 1: % of drugs used for DUB

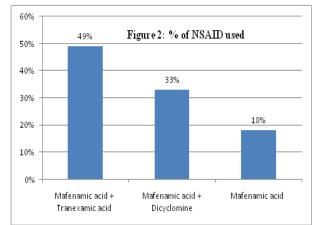


Figure 2: % of NSAID used

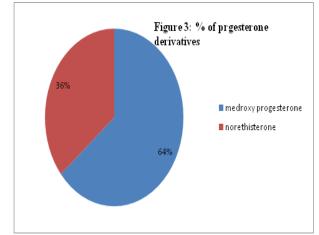


Figure 3: % of prgesterone derivatives

DISCUSSION

The most commonly used drug for DUB was NSAID.

Among the NSAID most commonly prescribed drug was Mafenamic acid. It acts by inhibiting prostaglandins thereby decreasing uterine contractions. This will be of helpful to decrease the bleeding.

NSAID was combined with Tranexamic acid which is an antifibrinolytic agent. It competitively inhibits the activation of plasminogen to plasmin and counteracts the high fibrinolytic activity in the endometrium. Thus it helps in arrest of bleeding.

Mafenamic acid was also combined with Dicyclomine. It is an anticholinergic that acts by antispasmodic effect, decreases uterine contractions, thus decreasing both blood loss and spasmodic pain.

Among the progesterone derivatives, Medroxyprogesterone was used in many patients compared to Norethisterone. They are synthetic progesterones that are active orally. They produce medical curettage which works well to correct midcycle spotting and when there is proliferative endometrium. Medroxy progesterone has the advantage of no effect on lipoproteins.

Ethinyl estradiol and Levonorgestrel was commonly used combination as OCPs. They produce effects similar to endogenous female sex hormones produced in the woman's body. These products can prevent ovulation and pregnancy, can also help in regulating the blood flow.

Combination of NSAID and a progesterone/OCP are used for patients who do not improve when they are administered individually.

Among the surgical methods the most common and only method that was practiced in the hospital was hysterectomy. It was mostly done on patients for those above 40 years and for those who have completed their family. For all these patients since there was no improvement with medical management hysterectomy was done.

REFERENCES

 Obstetrics and Gynecology. by <u>Charles R.</u> <u>B. Beckmann (Editor), Frank W. Ling</u> (Editor), Roger P. Smith (Editor), Barbara <u>M. Barzansky (Editor), William N.P.</u> <u>Herbert (Editor)</u>. Amenorrhoea and Dysfunctional uterine bleeding. Sixth edition. Lippincott Williams & Wilkins; 2002, chapter 36:p.464-72.

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2. Harwood-Nuss' Clinical Practice of Emergency Medicine (Clinical Practice of Emergency Medicine (Harwood-Nuss)) Allan Β. Wolfson W. Hendey MD Gregory (Editor), MD (Editor), Louis J. Ling MD (Editor), Carlo L. Rosen Schaider MD (Editor), Jeffrey J. MD Ghazala **O**. Sharieff (Editor), MD (Editor). Gynecologic emergencies.

Fourth edition. Lippincott Williams & Wilkins;2005, p.480-82.

- 3. Alexander F. Burnett.Clinical Obstetrics and Gynecology: A Problem-Based Approach. Alexander F. Burnett, Giuliana S Songster. Amenorrhoea and Abnormal uterine bleeding. Wiley & Sons, Incorporated, John; 2001. Chapter 41: p.287.
- 4. http://www.womenshealthchannel.com/du b/treatment.shtml.