

Use of Calcium Dobesilate and Norethisterone in Treatment of Menorrhagia of Dysfunctional Uterine Bleeding Origin

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ABSTRACT

Objective To find the success rate of calcium dobesilate and norethisterone in treatment of menorrhagia of dysfunctional uterine bleeding (DUB) origin.

Study design Descriptive case series.

Place & Duration of study Department of Obstetrics & Gynaecology, Bahawal Victoria Hospital / Quaid-e-Azam Medical College Bahawalpur, from December 2013 to December 2016.

Methodology Patients with dysfunctional uterine bleeding were included in this study. They were divided into two groups. Group A was given calcium dobesilate and Group B was given norethisterone for menorrhagia of DUB. The outcome in terms of resolution of symptoms was noted at follow up on 8, 10 and 12 weeks in outpatient department.

Results A total of 600 patients of 19 year to 35 year of age were enrolled. The success rate in terms of cessation of bleeding was 83.3% in group A. This was observed within 3-5 days of starting treatment and patients remained symptoms free for the next 10-12 weeks after discontinuation of the medicine. Success rate of 98% was observed in group B however on withdrawal of medicine bleeding started again. More side effects were also observed in group B.

Conclusions Arrest of bleeding in patients with menorrhagia of DUB was more frequently noted in group B where norethisterone was used, however, it recurred on withdrawal of medicine. More side effects were also observed in group B. In group A though success rate was low but no withdrawal bleeding occurred after cessation of medicine.

Key words Menorrhagia, Calcium dobesilate, Norethisterone, Dysfunctional uterine bleeding.

INTRODUCTION:

DUB is defined as the occurrence of irregular or excessive uterine bleeding in the absence of any recognizable pelvic pathology, general medical disease or pregnancy. It usually presents as menorrhagia.¹ It is a diagnosis of exclusion, occurs more commonly in adolescents and reproductive age

group.² A number of treatment options are available for DUB, some are meant to return the menstrual cycle to normal, others are used to reduce bleeding or eliminate menstruation. The available drugs include antiprostaglandins, antifibrinolytic, combined oral contraceptive pills, progestogens etc. Many surgical options are also available like dilatation and curettage (D&C), endometrial ablation, uterine artery embolization and hysterectomy.

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Norethisterone (Primolut-N) is a strong first generation progestogen with androgenic effects.¹⁴ Progestogens are mainly indicated in patients with anovulatory bleeding to reverse the effects of estrogen mediated endometrial proliferation and induce endometrial maturation.¹³ There is another drug calcium dobesilate (Doxium) with previously demonstrated efficacy in

the treatment of diabetic retinopathy and chronic venous insufficiency.^{3,4} The beneficial effects of the drug are related to its ability to decrease capillary permeability and to increase lymphatic transport. Due to these properties it is also being used in acute inflammatory conditions and in hemorrhoidal disease.^{5,9,10} Because of these properties it is expected to work in patients with menorrhagia of DUB origin. This study was conducted to find the success in terms of cessation of uterine bleeding with the use of two different drugs in patients with menorrhagia of DUB.

METHODOLOGY:

This study was conducted in the Department of Obstetrics & Gynaecology, Bahawal Victoria Hospital / Quaid-e-Azam Medical College Bahawalpur, from December 2013 to December 2016. Patients with menorrhagia were included after taking complete history and performing general physical, abdominal and pelvic examination. Investigations were done to rule out any pathology. Investigations included CBC, thyroid function tests, coagulation profile etc. Transvaginal ultrasound was done for any pelvic mass/pathology.

All female patients of reproductive age group aged 19-35 year with menorrhagia without underlying pathology, were included. Patients with hemoglobin less than 7gm/dl, thyroid disorders, miscarriage, uterine growths both benign and malignant and blood diseases, were excluded.

Patients were divided into two groups with same age, parity and complaints. Group A comprising 300 patients was given capsule calcium dobesilate (Doxium) and Group B comprising 300 patients received tablet norethisterone (Primolut -N). Both groups were followed up at 8,10 and 12 weeks for the arrest of bleeding. Descriptive statistics were used to present the data.

RESULTS:

A total of 600 patients were included and divided into groups A and B of 300 each. In Group A 250 improved as arrest of bleeding was observed gradually within 3-5 days and remained arrested for subsequent 10-12 weeks. The success rate was 83.3%. There was no withdrawal bleeding after cessation of medicine. Only 12 (4%) patients complained of mild abdominal discomfort, bloating and indigestion. In Group B bleeding stopped in 294 out of 300 patients giving success rate of 98%. In this group withdrawal bleeding was observed after cessation of medicine. Many side effects were also observed in 155 (51.6%) patients like nausea,

headache, increased blood pressure, breast tenderness, irregular cycles, exertional dyspnea, weight gain, and hirsutism.

DISCUSSION:

Dysfunctional uterine bleeding reflects a disruption in normal cyclic pattern of ovulatory hormonal stimulation to the endometrial lining. The bleeding is unpredictable in many ways as it may be excessive and heavy, prolonged, frequent or random.¹¹ In 90% of cases it is anovulatory.¹² About 1-2% of improperly managed anovulatory bleeding patients eventually develop endometrial cancer. History and examination is very important in diagnosing DUB. Complete blood count is an essential investigation in patient with abnormal bleeding. Other important conditions that must be ruled out include thyroid disorders and coagulation abnormalities. Same was done in all the study participants, in fact these were in exclusion criteria.

Transvaginal ultrasound is an excellent tool for evaluating pelvic pathology. New developments with Doppler ultrasound provide information on pelvic vascularity as well. Hysteroscopy is the gold standard procedure as it provides visualization of entire uterine cavity. In acute situation main priority of treatment involves correction of anemia and arresting ongoing blood loss.¹³ Thus early intervention must be done.

Many treatment options are available for DUB. This includes both medical and surgical aids. Hysterectomy is a last resort in patients with uncontrolled bleeding. Oral calcium dobesilate is a venotonic drug. Its use in DUB is based upon its property of being venotonic. Same effect is also reported in controlling hemorrhoidal bleeding.^{6,8} Due to these properties it was used in controlling dysfunctional uterine bleeding in our study. It was found to be effective in arrest of bleeding in 83.3% of patients with minimal side effects and no withdrawal bleeding. On the other hand norethisterone did produce more effective arrest of bleeding but the cessation of bleeding was drug dependent. On withdrawal bleeding re-started. Side effects were also more pronounced in this group.

CONCLUSIONS:

Norethisterone was superior in arrest of bleeding in patients with menorrhagia of DUB but it had more side effects and bleeding recurred when drug was stopped. Calcium dobesilate is thus recommended for the treatment of menorrhagia of dysfunctional uterine bleeding as it had minimal side effects and with no withdrawal bleeding.

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