A Treatment For Excessive Uterine Bleeding

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Introduction

FUNCTIONAL BLEEDING as a gynecological entity, shows little respect for the age, fertility, parity or socio-economic background of the affected patient. It may be encountered in association with flooding shortly after menarche or in the years immediately preceding menopause. It may constitute a problem as frequently in the frantic patient presenting with infertility, as it does in the overtired mother of many offspring. Although there is no doubt that fatigue, malnutrition and dietary deficiency are predisposing conditions contributing to functional bleeding, and as such are more commonly associated with the lower income family, one must at the same time accept and appreciate the importance of the stress factors which go hand-in-glove with so-called higher living, as being equally important in the production of this particular menstrual difficulty.

For any medical condition having such a variable etiology, it is only natural to predict that there would be an equally variable number of methods of treatment; and since the unfortunate trend supporting hysterectomy or radiation sterilization for these conditions has fallen into disrepute (except in very exceptional circumstances) multiple and varied methods of medical supervision have been advanced. Although improved nutrition and dietary supplementation, notably with iron and calcium and vitamins, have proved to be valuable adjuncts in almost any form of medical therapy which may be recommended, and similar aid has been derived from the milder forms of sedatives, tranquillizers and mood elevators, the majority of the recommended medical routines call for some form of hormone substitution therapy. There is no doubt that hormone treatment administered to the proper patient under proper supervision can be most valuable, but there is also no doubt that even in the best of hands the number of milligrams of ESTROGEN or PROGESTERONE which may ultimately be required by any given patient, may vary to such a degree (before the hemorrhage can be controlled), that any semblance of normal hormonal inter-relationship has been lost, and secondary side effects such as depressed ovulation are common. Similarly other endocrine systems may be disturbed and reveal still further dysfunction in the later cycles to come.

This problem becomes increasingly important if one should be considering treatment in the very young patient or in the patient who complains of associated infertility, for in these cases particularly, one must keep uppermost in one's mind the importance of maintaining normal hormonal balance such that reproductive function will not be impaired. The indiscriminate use of substitution hormones has been blamed frequently enough for the development of pathological conditions in breast and uterus that the time may now have come when some other and safer method of controlling the menorrhagic patient should be devised.

Several investigators have reported upon the successful use of a watersoluble BIOFLAVONOID* preparation in controlling certain obstetrical bleeding problems.[1-4] The basis for the use of this medication has been its apparent ability to restore normal small vessel structural integrity and thus, function, resulting in the control of bleeding which was said to be associated with pathological changes in these vessels.[3] Of particular interest is the recent report by Menkin[4] in which he describes a specific, intravascular inflammation-suppressing effect of vitamin-C-free, watersoluble BIOFLAVONOID.

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**The water-soluble citrus bioflavonoid compound with ascorbic acid was supplied as DUO-C.V.P. capsules through the courtesy of Dr. Harvey S. Sadow and Mr. R. H. Wygant of Arlington-Funk Laboratories, division of U.S. Vitamin and Pharmaceutical Corp., Montreal, P.Q. and New York, N.Y.*

It was with these thoughts in mind that this clinical investigation was undertaken (in a selected group of patients) and is presented at this time for clinical assessment.

Material and Methods

This series consists of a group of twenty-six patients treated in private practice. Their ages vary from fourteen to forty-six years of age. There were three patients with menorrhagia in the teen-age period, there were twelve who were nulliparous, of whom seven were married and were complaining of associated infertility. The remaining eleven were parous, six of whom were in the pre-menopausal age and complaining of associated menopausal symptoms.

The degree of bleeding was assessed in every case in relation to the total number of pads required for any given menstrual period and the associated necessity that more than one pad be worn at any given time. Similarly, the necessity that the patient remain in her home because of the amount of blood loss, rather than take part in normal school, social or household activities was noted. The majority of these patients found it necessary to control the flooding by remaining quietly off their feet in bed during the critical stage of their cycle. No patient who could control her menstrual flow for any given month with less than twenty pads is included in this study.

Although in many cases previous treatment prior to the commencement of the present study had included one or more dilatation and curettage procedures (such that the diagnosis of functional rather than organic bleeding was well established), it was felt that the presence of heavy, irregular bleeding in association with a normal sized, erect, regular, mobile uterus, with normal adnexa and a healthy closed cervix, provided sufficient background for one to proceed with the working diagnosis of non-organic bleeding. In no case has it been necessary to change the method of management and proceed to dilatation and curettage or other surgical procedure, with the exception of one case which will be specifically recorded in detail (case no. 2). This was the first patient upon whom this method of treatment was tried, and from whom such encouraging results were obtained, (even in the presence of known organic disease) that the remainder of the investigation was considered to be warranted.

The preparation containing water-soluble citrus BIOFLAVONOID compound 200 milligrams plus ASCORBIC ACID 200 milligrams was administered in capsule form to be taken orally under various routines. The initial plan involved the taking of four capsules a day with meals, usually for the whole month prior to the onset of the period, and then increasing to eight capsules a day for the duration of the period. Although this management proved eminently satisfactory in the earlier stages, it became apparent as individual variations in patient methods and patient reaction developed, that for the most part the administration of the preparation for a week prior to onset of the period and carrying on as before throughout the cycle of bleeding, produced equally good results. One of the earliest patients in the series started her medication when she felt the imminent approach of her period and would take one capsule every hour for the first day of her cycle, which gave the most relief that she has experienced from her flooding in the past ten years. (Case no. 3).

The duration of treatment has proved variable throughout this series. The three teen-age patients required supervision for three successive menstrual cycles and since that time have required no further assistance. Similarly the six menopausal patients required relatively short intervals of treatment, for two months in two instances, and for four months in the remaining patients. The remainder of these cases ceased treatment after three months but have voluntarily returned to treatment (as outlined) after discovering that their menorrhagic tendencies recurred after one or two cycles had elapsed. The first patient treated, in whom known pathology (a submucus and mural fibroid of the left cornu measuring 5 centimetres in diameter) existed as the cause of her flooding periods, remained on therapy until the surgical approach to her problem was feasible from an employment and social-economic standpoint.

Results

The assessment of the results in a series of this nature must be made for the most part entirely on

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the basis of the patient's degree of well being in subsequent menstrual cycles and her freedom from complicating side effects and reactions. In this respect it is sufficient to say that significant improvement was noted in every case in this series, and that the degree of improvement was such that no patient has requested a change in therapy or has been lost to supervision up to the present time.

It is perhaps interesting to note that six pregnancies have occurred in this group: three to patients who were previously infertile and three to patients who had already delivered a normal child. There were no untoward side effects other than those occasionally noted in the patient who finds it difficult to swallow a rather large capsule. The one patient who is treating herself by taking a capsule every hour on the first day of her menstrual cycle reports no gastro-intestinal or other symptoms of distress.

Case Report No. 1

Miss M. R., age 14. This patient was first seen with a haemoglobin of 55%, and was experiencing flooding menstrual bleeding, persistant at its present level for over three weeks.

She experienced her menarche in October 1958, with a normal period lasting four to five days. She had no further period until December when she again bled for five days and after stopping for two days, she began to flow very heavily. Flooding continued for three weeks and she was apparently admitted to hospital at that time under both gynecological and endocrinological supervision. Dilatation and curettage was performed, revealing no organic pathology in the endometrium or in the uterus or ovaries. She was apparently treated with conjugated ESTROGENS in gradually increasing doses and was taking 3.75 milligrams daily for 3 weeks following her D & C. During this time she also required transfusion with 2 pints of fresh whole blood. The bleeding tapered off after three weeks, but recurred again two weeks later and the hormone was re-administered in gradually increasing doses. She was finally elevated to the stage where she was requiring 6.25 milligrams of conjugated ESTROGEN daily before any diminution of flow could be noted. Other therapy consisted of mild sedation, full bed care, hospital supervision, and iron and vitamin supplement by mouth. Finally 200 milligrams of intra-muscular TESTOSTERONE was given on three occasions, along with the ESTROGEN preparation. She was discharged from hospital showing no evidence of vaginal bleeding, but after three weeks began to hemorrhage again, at which point she came under this present series.

Management consisted of 200 milligrams of water-soluble citrus BIOFLAVONOID compound plus 200 milligrams of ASCORBIC ACID, two capsules to be taken four times a day coupled with bed rest, sedation, and FERROUS SULPHATE, 5 grains three times a day after meals. Her bleeding subsided over the course of the first week of treatment and she was continued on 1 capsule four times a day for the following month. This was increased to 2 capsules four times a day through the next two successive periods. Both of these periods followed a relatively normal pattern, lasting six days on the first occasion and only four days on the second occasion. The first period after commencement of treatment recurred in thirty-one days, the second period in twenty-seven days. The patient was advised to stop treatment after the third month and has reported normal menstrual function since that time.

Case Report No. 2

As previously mentioned, this patient was the first one for whom the water-soluble BIOFLAVONOID-ASCORBIC ACID compound was prescribed.

Miss L. W., age 27. This young unmarried teacher was first seen on September 21, 1957, having been treated in Western Canada for flooding periods, lasting for seven or eight days, requiring three or four dozen pads a month, for the past eighteen months. She had had a D & C in 1956, at which time she was told she had a small fibroid on the left side of the uterus.

Initial examinations revealed a rather pale but well nourished young female with a haemoglobin of 58%. General examination was essentially normal with the only positive finding on gynecological examination being the presence of a left cornual fibroid rising anteriorally slightly above the pelvic brim and estimated at 6 centimentres in diameter. She was treated with FERROUS SULPHATE 5 grains t.i.d. p.c. plus ASCORBIC ACID 150 milligrams daily. She returned each month for repeat haemoglobin examinations after her period had been completed, and her haemoglobin reports for the next three months ranged between 58% and 65%. On the first day of her cycle she usually required at least fifteen pads and required between three and four dozen pads for the complete cycle.

When she reappeared in the office, following her summer holiday, her haemoglobin was again down to 55% and in October, she was started on water-soluble BIOFLAVONOID compound plus ASCORBIC ACID, one capsule four times a day until the onset of her period, and two capsules four times a day for the duration of the menstrual flow. In her own words, after the October period, "this is the best one yet." She carried on this routine for three months and her haemoglobin reached 74%, then 78% and finally 82% in December. Again FERROUS SULPHATE 5 grains t.i.d. p.c. was the only adjunct to the specific therapy previously outlined. From that time until the myomectomy was performed during the Easter vacation in 1959, the patient averaged between 16 and 20 pads per period. Her haemoglobin never fell below 75% and she was able to remain on her feet in the classroom without distress or embarrassment.

A large mural fibroid involving the endometrium and extending into the cavity of the uterus was removed by myomectomy. A pathology report records a nodular ovoid mass measuring 6 x 5 x 5 centimetres with evidence of extensive central hyaline degeneration.

Case Report No. 3

Mrs. E. G., age 30, para 2, gravida 2.

The past obstetrical history revealed the delivery of a living premature infant, weighing 4 lbs. 12 oz. in association with infectious hepatitis and followed by fulminating post partum toxemia. Her second pregnancy was considered to be complicated by essential hypertension, with blood pressures varying from 120/90 to 150/100 and 165/115 at the time of delivery in association with 2 + albuminuria. The patient had her menarche at the age of fourteen and had always had heavy periods (as did her mother and her aunt). During her high-school career she was frequently confined to bed for the first two days of her cycle, requiring more than a dozen pads a day, and the blood would literally flood on the floor if perfect quiet was not maintained. This situation apparently has continued without improvement except in association with her pregnancies.

She was first seen in June of 1956, having had a curettage several months previously which revealed normal post-ovulatory endometrium. The patient seemed a very healthy, tense, excitable young lady. Her haemoglobin was 72%; blood pressure was 150/100; urinalysis was normal. Pelvic examination was normal. The patient was referred to a hematologist for specific blood clotting investigation to be carried out.

The initial red count was 3.9 mil., the haemoglobin 76%, white count 7,500, platelets 50,720, tourniquet test strongly positive after only two minutes, bleeding time 6½ minutes. The patient was considered to have, possibly, thrombocytopenic purpura and was placed on 20 milligrams of PREDNISONE daily for twenty days. After this time her platelet count was 250,000 but the patient was no better as far as her menstrual flooding was concerned. She was kept on 5 mg. of PREDNISONE b.i.d. for a further month and in that time she experienced several nosebleeds and some spontaneous bruising. A tourniquet test on this occasion was negative. Further supervision after another month of 5 mg. of PREDNISONE b.i.d. showed no change from the above findings. A further month without treatment was followed by a platelet count of 340,000 with a red count 3,900,000, and a haemoglobin of 68%. Two months later (with still no treatment) laboratory investigation showed clotting time of 8 minutes, bleeding of 6 minutes, good clot retraction, prothrombin time normal, prothrombin consumption test of 35 seconds, platelet count within normal limits and marked tendency to bruising, but with a normal tourniquet test.

In view of this the haematologist decided against the presumptive diagnosis of thrombocytopenic purpura and for the next two years the patient tried various recommended combinations of ASCORBIC ACID, ESTROGENS and PROGESTERONE, coupled with constant iron therapy with no improvement. In October 1958 she was started on water-soluble BIOFLAVONOID-ASCORBIC ACID compound, taking four capsules a day for the month and two capsules four times a day for the duration of her period. Her first period after treatment commenced while she was acting chairman for an international meeting in a woman's organization to which she belongs. In her owne words, she said: "I could feel the period beginning, and fully expected to experience a catastrophe and have my shoes literally filled with blood. To my amazement I was able to finish the meeting without difficulty and made only normal changes during the rest of the afternoon and evening."

This patient has continued the treatment on a voluntary and self-administered basis fairly well constantly since that time and as previously noted, is now taking one capsule every hour for the first day of her cycle, and has always been able to take part in normal activities since starting this present form of management.

Case Report No. 4

Mrs. E. C., age 44, para 2, gravida 2.

The past history and general physical examination were normal. The patient presented in November 1958 with a four-month history of completely irregular flooding periods in association with a normal gynecological examination. She also experienced emotional disturbances and crying spells. She was difficult to live with and experienced increasing frequency of hot flush responses during the day and night. She had to use over a dozen pads on the first day of her cycle and the periods lasted anywhere up to ten or twelve days. Her haemoglobin was 72%. The patient was placed on FERROUS SULPHATE 5 grains t.i.d. p.c. and water soluble citrus BIOFLAVONOID compound with ASCORBIC ACID, one capsule four times a day for a month, followed by two capsules four times a days for the duration of her periods. This routine was repeated on four successive months, by which time the periods were more regular and were lasting only three to five days and were requiring less than 16 pads for the monthly flow. After the fourth month the patient agreed to stop treatment and for the remainder of her period of supervision has continued to have menopausal symptoms but her periods have been gradually diminishing. Her haemoglobin is 84% and she requires no oral iron therapy.

Discussion

Four representative cases have been described in detail in the preceding paragraphs. They represent

an average sampling of the type of response which it has been possible to obtain in the treatment of menorrhagia in various age groups and from various social and economic strata of the population.

It is always difficult to advance any theoretical explanation for clinical results obtained when dealing with a problem of this nature, and our further studies in this respect will have to be directed toward microscopic investigation of the endometrium.

In past years, in certain cases of menorrhagia, large doses of ASCORBIC ACID have been administered (both here and in Great Britain) in a moderate type of inquisitive approach to this problem of functional bleeding. It is well known that in the average well-organized home the only vitamin which is likely to be lacking is VITAMIN C, and one wondered whether one was in fact dealing with a sub-clinical type of VITAMIN C deficiency. This could certainly have been the case in England during the time when that country's financial situation rendered the importation of citrus fruit almost impossible. Although on occasion the administration of very large doses of ascorbic acid was thought to have given some remission of symptoms, on no occasion were the results as encouraging as those recorded here, and it can only be presumed that the combination of the water-soluble BIOFLAVONOID compound with the ASCORBIC ACID has produced some further benefit, at whatever level of haemorrhagic control it may act.

To anyone interested in the problem of infertility, and being unfortunately faced at the same time with associated menorrhagia, the ability to control both the degree of menstrual flow and in some cases even to improve the regularity of the menses with a non-hormonal approach, must be somewhat challenging and in this particular series three infertility patients have succeeded in becoming pregnant while under this routine.

The possibilities which are suggested after consideration of the extreme menorrhagia in the patient (Miss L. W.) who was bleeding in association with a fundal fibroid could be most valuable. We have all had patients admitted to hospital for transfusion and medical supervision prior to major surgery for organic gynaecological disease in association with haemorrhage. We have all found that after numerous bottles of packed red blood cells, the patient unfortunately experienced another menstrual period prior to the time that surgery could be undertaken, only to flood again to the degree that further hospital stay and expensive and even risky further transfusion had to be considered, to overcome the effect of this unfortunate error in timing. The use of the BIOFLAVONOID-ASCORBIC compound may prove to be a most valuable adjunct in this type of problem.

Summary and Conclusions

A series of 26 selected gynaecological patients have been given water-soluble citrus BIOFLAVONOID compound with ASCORBIC ACID in varying dosages as a method of control of menorrhagia.

The results from the standpoint of patient acceptance and patient satisfaction have been excellent.

Three representative cases of severe functional bleeding of three varying age groups have been summarized in detail.

One case of gross vaginal bleeding in association with a fundal fibroid in a young single patient has also been summarized, showing control of haemorrhage with this routine.

Three patients complaining of infertility in association with menorrhagia were able to conceive during treatment, while three other patients who had been previously pregnant again became pregnant.

In no case has there been any instance of side effects which were in any way distressing to the patient.

In no case was there any known risk that the treatment would interfere with normal endocrine interrelationship or with normal function of the reproductive organs involved.

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On the Asthma Front

Physicians who refuse to diagnose asthma in children and who tell parents the child will outgrow the condition are wasting precious time, believes Dr. Jerome J. Sievers of Los Angeles Children's Hospital. During the time thus wasted, the allergy may become chronic and difficult to control. Too many doctors, Dr. Sievers says, apparently are reluctant to tell parents that their child has asthma because the name connotes something incurable. Instead of starting proper allergic treatment, these doctors fruitlessly switch from one medication to another.

In New Orleans, a study of 45 asthmatic patients from one section of the city is drawing to a close. Dr. Robert Lewis of Tulane University, who heads the study, is trying to determine possible physiologic characteristics, such as eosinophile count, that change during an asthmatic attack.