

FUNCTIONAL UTERINE HAEMORRHAGE

by

K. V. WAGH* and V. SWAMY**

This rather unsatisfactory term is generally used to include all forms of abnormal uterine bleeding for which an organic cause cannot be found. In a great majority of cases the term is restricted to those in which the basic disturbance is in the rhythmical production of hormones by ovary and pituitary. I must emphasize here that it is very difficult to avoid an overlap because such disturbances are often caused by emotional factors and we realize also the intimate relationship of hypothalamus with the function of pituitary. Although there is no disease (organic), a diagnostic curettage, hystero-graphy and culdoscopy may finally clarify the diagnosis; only then can we exclude tuberculous endometritis and small polypi etc. Despite our knowledge of physiology of endocrines and their inter-relationship there are limitations to their therapeutic application. Though in functional uterine bleeding endocrine therapy produces dramatic results in arresting a bout of bleeding it does not correct the dysfunction and effect a permanent cure and hence we have to resort to surgical methods.

* Professor of Obstetrics and Gynaecology, Medical College, Jabalpur, M.P.

** Registrar in Obstetrics and Gynaecology, Medical College, Jabalpur, M.P.

Paper read at the 12th All-India Obstetric and Gynaecological Congress at Amedabad in December 1963.

In the past, contributions have been made by Bishop, Biskind, Holmstrom, Mazer and Israel, Sutherland from abroad, and Purandare, Nawal Kishore and Prabhakar Shah from India.

Material and Method

The present series consists of five hundred and fifty-two cases of functional uterine bleeding, collected over a period of three years (1960 to 1962) from Lady Elgin Hospital attached to Medical College, Jabalpur. In each case a detailed study of the following factors was undertaken:

I. (a) History, (b) Environment, (c) Emotional factors, (d) Marital problems, (e) Pattern of bleeding.

II. Clinical examination.

III. Investigations: (a) Routine investigations and also special haematological examinations to exclude blood dyscrasias etc.

(b) Histopathological examination of endometrial pattern of ovaries and uterus in hysterectomised patients.

Due to certain limitations histochemistry, culdoscopy, hystero-graphy and vaginal smear examinations could not be done in most of the cases.

Observation

Observations have been shown in Tables I to VIII.

During the last three years there were 552 cases of functional uterine bleeding (F.U.B.) admitted against a total admission of 2938 gynaecological cases. The average percentage of cases of functional uterine bleeding is about 18.7%, which perhaps is also the usual average in other parts of this country.

Table III shows the associated conditions in functional uterine bleeding cases. Majority of them (60%) were multiparae complaining of episodes of bleeding after lactation amenorrhoea or after completing the child-bearing function. (One hundred and eleven) twenty per cent of cases complained of sterility.

TABLE I
Incidence of Functional Uterine Bleeding

Year	Total admissions	F.U.B. cases	Incidence
1960	753	147	19.5%
1961	973	161	16.75%
1962	1212	244	20.1%
Total	2938	552	18.7%

It is evident from Table II that about 60% of cases belonged to the age group of 15 to 30 years. Majority of these cases, 127 (23%), fell into the age group of 26 to 30 years.

Majority of cases (61%) had bled for one year. This pointedly shows that women cannot tolerate the disturbances of their normal menstrual cycles and visit the hospital

TABLE II
Showing Age Distribution of F.U.B. Cases

Year	Below 15 yrs.	15-20 yrs.	21-25 yrs.	26-30 yrs.	31-35 yrs.	36-40 yrs.	41-45 yrs.	46-50 yrs.	Over 50	Total
1960	1	21	24	32	15	31	13	9	1	147
1961	—	28	24	37	14	25	28	5	—	161
1962	1	46	40	58	27	31	32	7	2	244
Total	2	95	88	127	56	87	73	21	3	552

TABLE III
Showing the main associated conditions in F.U.B.

Conditions	1960	1961	1962	Total
Sterility	36	27	62	125
Abortion	11	12	9	32
One-child sterility	12	27	23	62
Multiparity	88	95	150	333
Total	147	161	244	552

earlier for advice. A few cases seek advice when they develop anaemia, palpitation and weakness.

To study the pattern of endometrium dilatation and curettage was done premenstrually, wherever

TABLE IV
Showing duration of episode of bleeding in F.U.B.

Years	Duration of Bleeding												Total
	1 yr.	2 yr.	3 yr.	4 yr.	5 yr.	6 yr.	7 yr.	8 yr.	9 yr.	10 yr.	11 yr.	12 yr.	
1960	95	22	13	4	6	2	1	2	—	1	—	1	147
1961	98	36	14	5	3	—	2	2	—	—	—	1	161
1962	159	23	19	18	5	16	3	—	—	—	—	1	244
Total	352	81	46	27	14	18	6	4	—	1	—	3	552

It is obvious that iron deficiency anaemia is the commonest end result of prolonged bleeding (37.4%). Pain in the pelvic region associated with bleeding, either menstrual or paramenstrual, was present in 28.4% of cases; pain was either spasmodic or dull in nature.

feasible; 31.4% of cases showed proliferative phase with cystic dilatation of glands depicting anovular phase of menstrual cycle; 1.6% of cases though clinically asymptomatic showed tubercular endometritis.

Table VII indicates the associated organic lesions in cases of functional

TABLE V
Showing main associated complications in F.U.B.

Complications	1960	1961	1962	Total	Percentage
Pain	69	11	77	157	28.4%
Anaemia	68	52	87	207	34.4%
Hypertension	15	12	17	44	7.9%
Endocrinopathy	2	3	2	7	1.4%

TABLE VI
Showing the Endometrial Pattern in F.U.B.

Histology	1960	1961	1962	Total	Percentage
Proliferative phase ..	31	35	63	129	23.3%
Proliferative phase with cystic glandular hyperplasia	18	10	17	45	8.1%
Secretory phase ..	15	9	36	60	10.8%
Tuberculous endometritis	2	2	5	9	1.6%
Myoma	1	1	2	4	0.72%
Normal endometrium ..	18	21	18	57	10.2%
Chorionic villi ..	1	—	—	1	0.18%
Placental polyp ..	—	—	1	1	0.18%

uterine bleeding who were clinically asymptomatic. These lesions were noted only on endometrial histopathological examination and on examination of uterus and adnexa in hysterectomised patients. In the latter subinvolution of uterus, multiparous uteri with normal endometrial pattern, cervical polyps and adenomyosis were observed. This reveals that there are certain entities which cannot be diagnosed on clinical examination alone and these confront us apparently as cases of functional uterine bleeding.

Table VIII represents the detailed analysis of the treatment adopted in this series; 56.8% of cases were subjected to dilatation and curettage mainly as a diagnostic measure, and among these only a third showed therapeutic response, which was confirmed after a follow up period of at least one year. Out of those who were subjected to dilatation and curettage 47 cases underwent repeat curettage. One hundred and one patients between the age groups of 35 to 50 years were subjected to hysterectomy. Pan-hysterectomy

TABLE VII

Showing associated organic lesions in F.U.B.

Organic Lesions	1960	1961	1962	Total	Percentage
Multiparous uterus ..	13	18	13	54	27.1%
Subinvolution ..	4	6	5	15	
Adenomyosis ..	6	5	6	17	
Endocervicitis ..	6	3	1	10	1.8%
Leiomyoma ..	3	1	5	9	1.6%
Cervical polyp ..	3	1	5	9	1.6%
Cystic ovaries ..	1	—	7	8	1.4%
Bicornuate uterus ..	1	1	—	2	0.36%
Prolapse uterus ..	—	—	2	2	0.36%
Carcinoma cervix ..	—	1	1	2	0.36%
Stein-Leventhal syndrome ..	—	—	2	2	0.36%
Endometriosis ..	—	1	—	1	0.18%
Endometrial polyp ..	1	—	—	1	0.18%

TABLE VIII

Showing the line of treatment adopted in F.U.B.

Mode of Therapy	1960	1961	1962	Total	Percentage
Hormones	16	10	9	35	8%
Dilatation & Curettage	68	83	163	314	56.8%
Total Hysterectomy ..	4	3	14	21	3.8%
Pan-Hysterectomy ..	14	17	37	78	15.01%
Sub-total Hysterectomy	2	—	—	2	0.36%
Deep X-Ray	2	—	—	2	0.36%
Blood Transfusions ..	14	12	18	44	8.2%
Anti-anaemic and dietetic treatment ..	7	12	6	25	4.5%
Non-treated cases ..	10	13	26	49	9.0%

was carried out in 78 patients (15.01%), 21 cases were subjected to total hysterectomy (3.8%) and subtotal hysterectomy was done in only two cases (0.36%). Hormonal therapy was restricted to relatively younger age group of patients, i.e. 15 to 20 years. Oestrogens, androgens and Norluton were found useful. Non-availability and high cost prevented the usage of recent progestational agents in this series. In patients of younger age group (puberty) with severe anaemia blood transfusions were also given along with hormonal therapy.

Discussion

The theories of etiology of functional uterine bleeding still remain the same. There is some ovarian dysfunction with disturbances of hypothalamic - pituitary - ovarian - endometrial axis. This has necessitated primarily the study of the endometrial pattern and thus the usage of such terms as hyperplasia of the endometrium and irregular shedding etc., is prevalent. Sutherland records his opinion in unmistakable language. "It is absolutely necessary to carry out dilatation and curettage in well established uterine bleeding irrespective of age and the endometrium is to be studied histologically".

In puberty group of girls and the young oestrogens were freely used in 5-10% of cases. Initially 5 mgms. every two hours for 24-48 hours remarkably checked bleeding and severe withdrawal bleeding was prevented by gradual reduction of the hormones. Subsequent cyclic use of progesterone (10 mgms/day) helped

to restore the normal menstrual cycle. These patients in addition to the hormones also received high protein and low fat diet with vitamins, iron and crude liver extract.

In the child-bearing period androgens have been frequently used in daily doses of 25 to 50 mgms. reaching up to a maximum of 200 mgms. in one month. In most of the cases this was preceded by dilatation and curettage. No masculinizing effects were observed in these cases; on the contrary, improvement of sex libido and feeling of well-being were noticed. Greenblatt and Aydar point out that functional uterine bleeding in adolescence is self-limited and treatment should be conservative. The new progestational agents like norlutin, Enovid and Provera have arrested acute uterine bleeding within a few hours when administered orally in doses of 30 to 60 mgms./day. This therapy may create a picture of pseudo-pregnancy. Withdrawal-bleeding starts 5 to 20 days after cessation of medication. Our experience with the above therapy is limited.

In this series following advantages were observed with hormone therapy:

- i. Temporary arrest of haemorrhage.
- ii. Menstrual cycles were regularised in 23.4% of cases.
- iii. Operative treatment could be postponed till the condition of patients improved.

With the advantages in view one cannot generalise the treatment, as the cost of treatment and unpredictability of results are the main limitations.

Emotional factors may play an im-

portant role in the causation of functional bleeding as can be seen from the normal endometrial pattern in 20% of cases in this series. History of emotional influences is not always easily obtainable; where such history was forthcoming tranquilizers were also used in the treatment. Close collaboration of a psychiatrist is essential in such cases.

Hysterectomy was the surgical treatment of choice in 19% of cases though a few cases (0.96%) were subjected to wedge resection of ovaries. One hundred and one cases (19%) belonging to the age groups of 35 to 45 years were subjected to hysterectomy. Out of these, 58% of cases had previously undergone diagnostic and therapeutic curettage. Hysterectomy in these cases gave a satisfactory relief when hormones, psychotherapy and curettage had proved futile. No mortality was observed in hysterectomised patients. We felt that artificial creation of menopause and utriculoplasty are not helpful to our type of cases. Individual cases may benefit from such therapeutic measures.

In 101 hysterectomised patients 57 did not show any pathology in the uterus and adnexa. In such cases one wonders if only psychotherapy as distinct from operative treatment may have been rewarding.

Conclusions

This study consists of 552 cases of functional uterine haemorrhage.

Clinically causes of functional uterine haemorrhage are not always evident though failure to ovulate may produce such an episode.

Dilatation and curettage is imperative in the child-bearing period irrespective of age.

Hormonal therapy is beneficial only in selected cases. This therapy is more suitable for young virgins along with supportive measures.

At or near menopausal age hysterectomy is the treatment of choice.

Our distinct impression is that hysterectomy could be avoided in a few cases with close collaboration of psychiatrist and endocrinologist.

Summary

Five hundred and fifty-two cases of dysfunctional uterine haemorrhage have been presented. Incidence, age distribution, associated conditions, duration of episode of bleeding, associated organic lesions and line of treatment have been discussed. Emphasis is laid on conservative line of therapy in younger group of patients.

Acknowledgements

Our sincere thanks are due to Dr. J. C. Sachdev, Dean, Medical College, Jabalpur, for permission to publish this paper.