

## Dysfunctional Uterine Bleeding (Study of 100 cases)

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### Summary

100 cases of clinically diagnosed Dysfunctional uterine bleeding were analysed clinically and supplemented by histological studies. This condition is common in reproductive (58%) and perimenopausal (38%) periods. It is encountered more in multiparous (87%) than in nulliparous and primiparous (13%) women. Menorrhagia (34%) followed by metrorrhagia (23%) and menometrorrhagial (18%) were frequent types of bleeding. Histologically, hyperplastic endometrium (44%), proliferative (34%) and secretory (13%) endometria were encountered. Associated incidental organic Pathology was found in 15% cases.

### Introduction

Dysfunctional uterine bleeding (DUB) is an abnormal bleeding from uterus in the absence of an organic pathology to account for (Dutta, 1994). It commonly occurs in reproductive and perimenopausal age groups. When it occurs in the perimenopausal age, a careful screening for malignancy is imperative and should be treated promptly. Term like functional uterine bleeding has been used by past authors (Ghosh and Sengupta, 1968 and Mehrotra et al., 1972). The present authors have attempted a detailed study relating to clinical and histological findings in clinically diagnosed cases of DUB.

### Material and Methods

100 cases of clinically diagnosed DUB patients from Civil Hospital, Belgaum and K.L.E.S.' Hospital and Medical Research Centre, Belgaum, during the period from September 1997 to August 1998 are included in this study.

The material consists of endometrial curettings (59 cases), fractional curettings (2 cases), biopsies (4 cases) and thirty five hysterectomy specimens.

A detailed clinical history, gynaecological examination and other investigatory findings were recorded. Haematoxyline and Eosin stained endometrial slides were studied. The clinical and histopathological findings were analysed and following observations were made.

Most of the DUB cases were in the age group of 21-40 years (58%) followed by 41-50 years (38%), only 2% of the cases were above 50 years of age and 2% were below 20 years of age.

Highest (87%) incidence of DUB was found in the multipara, 7% were in para 1 and 6% were in the nulliparous patients.

Menorrhagia was the commonest type of bleeding (34%). Metrorrhagia and menometrorrhagia

accounted for 23% and 18% cases respectively. Profuse bleeding following amenorrhoea was observed in 14% cases. Polymenorrhoea was the least common type of bleeding seen in 11% cases.

The spectrum of histopathological changes in DUB were as shown in the Table I.

In patients with proliferative phase endometrium, menorrhagia was the common type of bleeding in 11 cases (32.4%) followed by metrorrhagia in 10 cases (29.4%) and menometrorrhagia in 8 cases (23.5%). Polymenorrhoea was found in 5 cases.

In patients with proliferative phase endometrium, menorrhagia was the common type of bleeding in 11 cases (32.4%) followed by metrorrhagia in 10 cases (29.4%) and menometrorrhagia in 8 cases (23.5%). Polymenorrhoea was found in 5 cases.

In secretory type of endometrium, menorrhagia was common type of bleeding in 8 cases (61.5%) metrorrhagia in 3 cases (23%) and menometrorrhagia and polymenorrhoea in one case (7.7%) each.

Amongst 44 cases of endometrial hyperplasia, menorrhagia was present in 11 cases (25%) menometrorrhagia and bleeding following amenorrhoea was present in 10 cases each (22.7%), 8 patients (18.2%) had metrorrhagia and 5 patients (11.4%) presented with polymenorrhoea.

Of the two cases of irregular shedding one case presented with menorrhagia and other with polymenorrhoea. Products of conception presented with menometrorrhagia in both the cases. Arias-Stella reaction

presented with menorrhagia in one case and bleeding following amenorrhoea in the other case. Pill endometrium was observed in two cases, one presented with menorrhagia and other with metrorrhagia. One case of endometrial polyp presented with menorrhagia.

Out of 100 cases clinically diagnosed as DUB, 15% cases had organic pathology as incidental findings (table II). Products of conception and Arias-Stella reaction was observed in 2% cases each. Leiomyoma accounted for 4%, adenomyosis 6% and polyp 1% cases. All these cases are included in the study because these are clinically diagnosed as cases of DUB

**Table II: DUB cases with incidental organic Pathology**

Organic Pathology	No. of Cases
Leiomyoma	4
Adenomyosis	6
Chronic endometritis	-
Chorio-decidual tissue	2
Arias-Stella reaction	2
Endometrial polyp	1
Endometrial malignancy	-
Total	15

## Discussion

DUB can occur in any type of endometrium both normal and abnormal. In the present series endometrium was normal in 47% cases and abnormal in 53% cases.

In the childbearing age group Joshi and Deshpande (1964) reported 62.9% cases and Mehrotra et al., (1972) reported 71.3% cases. The incidence during child-bearing period is high probably because these

**Table I: Spectrum of histopathological changes of endometrium in DUB**

Spectrum	No. of Cases
Proliferative endometrium	34
Secretory endometrium	13
Atrophic endometrium	-
Pill endometrium	02
Hyperplastic endometrium	44
a. Simple	32
b. Complex	
i. Without atypia	12
ii. With atypia	-
Irregular shedding	02
Products of conception	02
Arias Stella reaction	02
Endometrial polyp	01
Total	100

patients seek medical aid readily than other groups.

Joshi and Deshpande (1964) report DUB incidence of 61.5% in multipara and 38.5% in primi and nullipara. Rosario (1969) reports higher incidence of 97% in multipara. The higher percentage is probably because the general population shows higher incidence of multiparity.

As regards to type of bleeding Ghosh and Sengupta (1968) found menorrhagia in 38% cases which is comparable with the present study. However Mehrotra et al., (1972) found higher incidence of 52% menorrhagia in their series.

In the histological pattern, the endometrial hyperplasia was the commonest. Rosario (1969) reported 33.5% endometrial hyperplasia in their series. Ghosh and Sengupta (1968) reported higher incidence of 70% adenomatous hyperplasia. This histological pattern is the commonest histological spectrum in DUB cases. It is well known that the cause of bleeding is not hyperplastic endometrium but it is because of sudden fluctuation of oestrogen or drop in the level of oestrogen.

Proliferative endometrium was in 34% cases in the present series, Kanakadurgamba and Srinivasa Rao (1964) and Joshi and Deshpande (1964) found 34% and 51.9% respectively. Bhattacharji (1964) however in his study found a slightly lower incidence of 19.6% proliferative endometrium.

Joshi and Deshpande (1964) found 17.9% of secretory endometrium which is comparable with present study. Bhattacharji (1964) reports higher incidence of 43.9%, Das and Chugh (1964) report 22.5% secretory endometrium in their series. This higher incidence of secretory endometrium has been attributed to premenstrual curettage. In the present series endometrial polyp was present in one case which presented with menorrhagia.

Joshi and Deshpande (1964) reported 1.4% cases of irregular shedding while the present study had 2% cases. Pill endometrium was seen in 2 cases. Products of conception and Arias-Stella reaction were seen in two cases each. Proper exclusion by clinician would have aided these cases.

In the present series Menorrhagia and Metrorrhagia accounted in all types of histological patterns. In addition to above types of bleeding, menometrorrhagia, bleeding following amenorrhoea and polymenorrhoea were observed in hyperplastic endometrium.

The associated incidental organic pathology in DUB was found in 15% cases. Clinically these were underdiagnosed. Das and Chug (1964) found over all organic pathology in 36.6% cases. Chorio-decidual tissue and Arias-Stella reaction were accounted in 2 cases each in the present study. However careful search did not reveal chorio-decidual tissue in the later two cases.

Adenomyosis in the present series was present in 6% cases. Joshi and Deshpande (1964) reported 4.8% incidence. In the present study leiomyoma accounted in 4% cases. Joshi and Deshpande (1964) report 1.09% of leiomyomas. Wagh and Swamy (1964) reported 1.5% incidence of endometrial carcinoma in their series. In the present series no case of endometrial carcinoma or chronic endometritis was detected.

### Conclusions

A study of one hundred cases of clinically diagnosed as DUB was carried out from September 1997 to August 1998 in the department of Pathology, J. N. Medical College, Belgaum. The clinical and histopathological findings were analysed. It was found that commonest age group for DUB was 21-40 years followed by 41-50 years, most of the patients were multiparous. All types of bleedings were found, commonest being menorrhagia. Commonest pattern of endometrium was endometrial hyperplasia and associated incidental organic pathology was found in 15% cases.

### References

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Dysfunctional uterine bleeding is defined as abnormal uterine bleeding in the absence of uterine pathology or medical illness. It is more often seen in the pubertal and perimenopausal periods, and in most cases, it is associated with anovulation, leading to lack of estrogen-induced negative feedback on the pituitary gland, resulting in unopposed estrogen stimulation to the endometrium. Dysfunctional uterine bleeding is a common problem faced by the gynecologist today, with many treatment options existing and newer ones being developed. With a complete understanding of the menstrual cycle and a Epidemiology of dysfunctional uterine bleeding dysfunctional uterine bleeding pubertal period (mpp) in the structure of gynecological diseases of childhood and adolescence ranges from 10.0 to 37.3%.<sup>1</sup> We have strict sourcing guidelines and only link to reputable media sites, academic research institutions and, whenever possible, medically peer reviewed studies. Note that the numbers in parentheses ([1], [2], etc.) are clickable links to these studies. If you feel that any of our content is inaccurate, out-of-date, or otherwise questionable, please select it and press Ctrl + Enter. Dysfunctional Uterine Bleeding - an easy to understand guide covering causes, diagnosis, symptoms, treatment and prevention plus additional in depth medical information.<sup>2</sup> Dysfunctional uterine bleeding occurs when the cycle's hormonal signals get thrown off. This can include alternating periods that are heavy and light, spotting or unpredictable shorter and longer cycles. Regular monthly menstrual cycles flush out the endometrial lining, which is the blood-enriched layer of tissue that grows inside the uterus every month in anticipation of a possible pregnancy.