

# Quality of life during menstruations in women with inherited bleeding disorders (About 31 patients).

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## INTRODUCTION :

Menstruations can be a source of embarrassment and discomfort for many women by their impact on social and professional life.  
We found that menorrhagia is more common in carriers of inherited bleeding disorder (IBD) with an incidence of 90% (all pathologies) against 40% in a control group.  
**Aim: To assess the quality of life of women with IBD during their menstrual periods.**  
To analyze the possibly influencing factors.

## PATIENTS & METHODES :

A questionnaire designed to assess the characteristics of the menstrual cycle including menstrual blood loss and its impact on their quality of life was developed.  
Thirty-one patients carriers of an IBD and followed in both hemophilia center and Gynecology Department, in Aziza Othmana University Hospital, agreed to answer the questionnaire.  
All patients had menstruations for at least 2 years.

The questionnaire consists of five main items:

- The general condition
- The impact of menstruation on daily activities
- Dysmenorrhea
- Quality of life during menstruation

SCORE A: How many times during their periods they feel:  
Full of life and energy, Calm and serene, happy and good about yourself  
Each of these responses is scored from 1 (at any time) to 6 (always)  
Score A  $\leq$  9 A sign of impaired quality of life.

SCORE B: How many times during their periods they feel:  
Nervous, sad and low, Tired or Exhausted  
Each of these responses is scored from 1 (always) to 6 (at any time)  
Score B  $\leq$  9 sign a quality of life impaired.

- Absenteeism and hospitalizations during menstruation

The questionnaire also includes questions on menstrual characteristics and extra genital hemorrhagic manifestations and their frequencies.  
The duration of menstruation is considered normal when it is less than 6 days and prolonged when it is  $\geq$  6 days.  
The abundance of menstrual flow was classified according to the assessment of patients with Normal and abundant. Patients were also divided into two groups based on the number of hygienic pads :  $>$  40 and  $\leq$  40 towels in cycles. We also specified the type of sanitary napkin (small, medium or large).

### Statistical analysis :

We computed simple frequencies and relative frequencies for categorical variables qualitative averages, medians and standard deviations for the quantitative variables.  
The comparison between two means of independent groups was performed using the Student t test. The comparison of percentages of independent series was performed by the Pearson's chi square test . Statistical significance level (p) was set at 0.05.

## RESULTS :

The average age of patients was  $23.3 \pm 8.5$  years with extremes ranging from 14 to 41 years.  
The most common IBD is Von Willebrand (VWD) with a rate of 38.7%.

IBD	Nombre	%
Von Willebrand disease	12	38,7%
Glanzmann thrombasthenia	7	22,6%
Jean Bernard & Soulier's disease	5	16,1%
factorVII deficiency	3	9,7%
Afibrinogenemia	2	6,5%
factor V & VIII deficiency	1	3,2%
factor X deficiency	1	3,2%

Table 1 : Distribution of inherited bleeding disorders in the population

### Menstrual characteristics :

Most patients (N = 27 - 87.1%) had regular cycles and about two thirds of them (67.9%) felt the duration of their menstrual cycle was normal (between 28 and 35 days).  
The half of patients (N = 16 - 51.6%) had received at least one treatment to regularize menstrual cycles.  
The average duration of menstruation was  $6 \pm 2$  days with a range of 4 to 15 day, 54.8% of patients (N = 17) had a menstrual period more than 6 days.  
The menstrual flow is considered normal in 61.3% (N = 19) of patients surveyed and abundant in 32.3% (N = 10) of them.  
The average number of pads used during menstruation was  $15.9 \pm 13$  (range 2-60). Most patients were using medium sanitary napkin (58.1%) against 22.7% who used large.

### The impact of menstruation on daily activities:

The values of the score assessing the impact of menstruation on daily life varied from 00 to 11 with an average of  $5.00 \pm 3.47$ .  
The score was more than eight (severe impairment) in 19.35% of patients (N = 6) and was  $>$  4 and  $\leq$  8 (moderate impairment) at 35.48% (N = 11).

### Dysmenorrhea:

The average score of dysmenorrhea intensity was  $2.51 \pm 1.45$  (range 1-6).  
The rate of women claiming to have severe dysmenorrhea ( $\geq$  4) is 21.8% (N = 7), as well as those with medium dysmenorrhea intensity.  
Eleven patients (35.5%) used medical treatment to relieve dysmenorrhea (anti-inflammatory drugs in 54.5%, analgesics 27.3% and combined oral in 18,2% of cases).

### Quality of life during menstruation:

The score A evaluating the influence of menstruation on the quality of life had a mean value of  $8.43 \pm 4.9$ , while the average score B was  $10.45 \pm 4.57$ .  
Impaired quality of life (score  $\leq$  9) was observed in 64.5% (N = 20) of patients according to the score A and in 41.9% (N = 13) of them according to score B .

### Absenteeism and hospitalizations during menstruation:

During menstruation 22.6% of patients (N = 7) are forced to be absent from their work or school, because of the inconvenience caused by the menstrual flow.  
On the other hand, 48.4% of patients (N = 15), were hospitalized at least once before the heavy menstrual flow.  
Dysmenorrhea was the cause of absenteeism in only 16.1% (N = 5) of the patients questioned, while three of them (9.6%) were brought at least once to the emergency in order to receive analgesic treatment.

We also analyzed the correlations between different menstrual characteristics and quality of life of studied patients.

		PGC	Score A	Score B	A	H
Menses duration	$<$ 6 days (n=14)	35,7%	$9,35 \pm 4,78$	$11 \pm 4,54$	7,1%	64,3%
	$\geq$ 6 days (n=17)	35,3%	$7,62 \pm 5,01$	$10 \pm 4,69$	35,3%	35,3%
	p	NS	NS	NS	0,073	NS
Menstrual flow	Normal (n=21)	24,8%	$9,14 \pm 5,28$	$11,57 \pm 4,73$	19%	52,4%
	Abundant (n=10)	60%	$6,77 \pm 3,59$	$8,1 \pm 3,28$	30%	40%
	p	0,06	NS	NS	NS	NS
DSM	Mild (n=24)	33,3%	$8,91 \pm 5,2$	$11,12 \pm 4,64$	00%	00%
	severe (n=7)	42,8%	$6,85 \pm 3,62$	$8,14 \pm 3,71$	71,4%	00%
	p	NS	NS	NS	0,001	NS

PGC : poor general condition, DMS: dysmenorrhea , A : absenteeisme, H : hospitalization.

Table 2: Correlations between menstrual characteristics and quality of life scores

The patients interviewed are absent more frequently when prolonged menstruation (7.1% vs 35.3% absenteeism), although this remains to borderline significance (p = 0.073).

The correlation between abundance of menstrual flow and general condition is on the limit of significance (p = 0.06).

The correlation between the intensity of dysmenorrhea and the absenteeism rate is statistically significant (p  $<$  0.001). Indeed, in case of dysmenorrhea severe (score  $\geq$  4), the absenteeism rate was 71.4% against 00% in case of dysmenorrhea low intensity (score  $<$  4).

## CONCLUSION

All studies conducted in patients carrying an inherited bleeding disorder confirm the **impaired quality of life** in these patients especially in menstrual periods due to excessive blood loss (menorrhagia).

These menorrhagia are usually accessible to treatment provided to make the diagnosis.

It is therefore recommended in these patients to achieve an **objective assessment** of menstrual blood loss and, through a rating system Chart as described in 1990 by Higham et al, to differentiate patients requiring patient medical and surgical (score  $>$  100) and those to be reassured.

Above all, it is essential that care providers (family physicians, gynecologists, haematologists) be **AWARE** of the high prevalence of menorrhagia in these patients, of therapeutic possibilities but also of the need to treat these patients to improve their lives.

