

Use of Pictorial Chart for Managing Menorrhagia Among Turkish Women

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Abstract

Objective: The aim of this study was to detect the personal changes during menstrual periods among Turkish women, and to search whether a pictorial blood assessment chart could be used for such a purpose.

Materials and Methods: In this study 600 women were included. Along with a questionnaire, pictorial blood assessment chart (PBAC) was applied to investigate the women's bleeding pattern during the menstrual period. The PBAC is based on the visual appearance of stained towels, tampons and the presence of clots.

Results: When the pictorial scores of the participants were evaluated, 218 patients (36.3%) had a score lower than 50, 100 patients (16.7%) had between 50-70, 129 patients (21.5%) had between 70-100 and 153 (25.5%) patients had a pictorial score greater than 100. During menstruation, 79% of women using 5 or more pads had a pictorial score greater than 50, 67% of women having blood on their underwear had a pictorial score greater than 50 and 76% of women using big sized pads had a pictorial score greater than 50.

Discussion: We recommend the use of pictorial blood assessment chart for the diagnosis of menorrhagia and evaluation of the treatment outcomes.

Keywords: menorrhagia, pictorial chart, blood assessment chart

Özet

Türk Kadınlarında Menstrüel Kanamanın Değerlendirilmesinde Piktoryal (Resimli) Kartın Kullanılması

Amaç: Bu çalışmanın amacı, Türk kadınları arasındaki menstrüel periyot farklılıklarını ortaya koymak ve bu amaçla piktoryal kartın kullanılıp kullanılmayacağını ortaya konmasıdır.

Materyal ve Metot: Bu çalışmaya 600 kadın dahil edilmiştir. Kadınların âdet dönemlerindeki kanama paternlerini ortaya koymak için bir anketle birlikte piktoryal kart uygulanmıştır. Piktoryal kart lekelenmiş pedlerin, tamponların ve pıhtıların görülmesiyle değerlendirilir.

Sonuçlar: Katılımcıların piktoryal skorları değerlendirildiğinde 218 hastanın (%36.3) 50'den düşük, 100 hastanın (%16.7) 50 ile 70 arası, 129 hastanın (%21.5) 70 ile 100 arası ve 153 hastanın (%25.5) 100'den yüksek puan aldıkları tespit edilmiştir. Günde 5 veya daha fazla ped kullananların %79'unun, iç çamaşırında lekelenme olan hastaların %67'sinin ve büyük boy ped kullananların %76'sının piktoryal skorlarının 50'den yüksek olduğu bulunmuştur.

Tartışma: Menoraji tanısının konulması ve tedavi seçeneklerinin değerlendirmesi için piktoryal kartın kullanılmasını önermekteyiz.

Anahtar sözcükler: menoraji, piktoryal kart, kanama değerlendirme formu

Introduction

Menstrual problems represent one of the most common reasons for women in developed countries to seek care.

Menstruation can be a cause of embarrassment and inconvenience to many women and has a major influence on women's lifestyle and employment (1).

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Menorrhagia is defined as a menstrual loss of 80 ml or more blood per period (2). It is seen in 5% of women of reproductive age and constitutes 12% of gynecological referrals (2). Most of the techniques used to quantify menstrual blood loss require laboratory facilities and are costly, therefore they have never

become part of routine practice. Using a special scoring system, namely a simple pictorial blood assessment chart (PBAC) may be convenient for objective assessment of menstrual loss (3).

The aim of this study was to detect the personal changes during menstrual periods among Turkish women, and to search whether a pictorial blood assessment chart could be used for such a purpose.

Materials and Methods

In this study 600 women were included. Along with a questionnaire, pictorial blood assessment chart was applied to investigate the women's bleeding pattern during the menstrual period. Statistical Package for Social Sciences, version 13.0 for Windows (SPSS Inc., Chicago, IL) was used for statistical analysis.

Pictorial blood assessment chart

We used the original pictorial blood assessment chart defined by Higham et al. in 1990 (3). This original scoring system was based on the visual appearance of stained towels, tampons and the presence of clots. It was devised to allow comparison between perceived and actual blood loss. The details of the scoring system is given in Table 1.

Results

Mean age of the 600 women was 20.4. Of all women 63.8% were between 16-20 years. Among all participating women; 39 women (6.5%) had easy bruising, 86 (14.3%) had epistaxis, 248 (41.3%) had gingival bleeding, 193 (32.2%) had bleeding after surgical removal of a tooth and 52 (8.7%) had bleeding after previous surgery.

Of all women responding the questionnaire, 3.3% had menstruation every 15-20 days, 55.5% had menses every 25-28 days, 15.3% had every 29-31 days, 15% had every 21-24 days, 8% had menses every 32-40 days. The menstruation lasted 3-8 days in 97% of patients, 9-11 days in 2.3% of patients. During menstruation, 160 women (26.7%) used 5 or more pads, 254 women (42.3%) used big size pads and 233 women (38.8%) defined menstrual blood on their underwear.

When the pictorial scores of the participants were evaluated, 218 patients (36.3%) had a score lower than 50, 100 patients (16.7%) had between 50-70, 129 patients (21.5%) had between 70-100 and 153 patients (25.5%) had a pictorial score greater than 100. Of the women 79% using 5 or more pads during menstruation had a pictorial score greater than 50, 67% of women having blood on their underwear had a pictorial score greater than 50 and 76% of women using big sized pads had a pictorial score greater than 50.

Discussion

Menorrhagia or excessive menstrual bleeding, is a common clinical problem among women of reproductive age group (4). It is subjectively defined as heavy and recurrent cyclical menstrual bleeding (5). Objectively, it is defined as a total menstrual blood loss greater than 80 ml per menstruation (6). It is usually hard to quantify menstrual blood loss objectively as it requires highly specialized techniques and a lot of time. As a consequence, menorrhagia is defined subjectively in clinical practice which is prone to many errors.

Pictorial blood assessment chart (PBAC) is a simple non-laboratory method for semi-objective diagnosis of menorrhagia, using scores recorded by women themselves (3). It was first described by Higham et al. (1990). A score of 100 was used to define menorrhagia in its originally described form (3). The scoring was based on the number of sanitary towels and tampons used each day and their degree of soiling. The number and size of any clots passed were also taken into account and scored. Although the validity of this chart has been debated (7), it is simple to use and is at present the best practical tool available for the assessment of menstrual blood loss. The method has been reported to have a sensitivity of 86% and a specificity of 89% (3).

Up to now, numerous studies in the literature have employed the pictorial blood assessment chart to evaluate menstrual bleeding. In a recent study, evaluating the roles of tranexamic acid and medroxyprogesterone acetate in the management of dysfunctional uterine bleeding, the authors employed the PBAC to quantify the change in vaginal bleeding (8). In another study, disorders of menstruation and their effect on the quality of life in women with congenital factor VII deficiency were evaluated by using pictorial scores (9). Another interesting study was performed recently by Bushfield et al. (10). In this study, the authors compared the efficacies of levonorgestrel intrauterine system and thermal balloon ablation in cases of heavy menstrual bleeding, again by employing PBAC.

This study examines the menstrual pattern in Turkish population by using the pictorial scoring system. In this scoring system evaluating the duration of menstruation, number and size of pads and quantity of bleeding, 50 was defined as the cut-off value (11). The menstrual pattern of participants and quantification of menstrual blood loss were made available by the use of the pictorial chart in this study. More than half of the participant women (55.5%) in this study had menstrual bleeding every 25-28 days. Both

Table 1. Pictorial blood assessment chart

TOWELS	
1 point	For each lightly stained towel
5 points	For each moderately soiled towel
20 points	If the towel is completely saturated with blood
TAMPONS	
1 point	For each lightly stained tampon
5 points	For each moderately soiled tampon
20 points	If the tampon is completely saturated with blood
CLOTS	
1 point	For small clot
5 points	For large clot

oligomenorrhea and polimenorrhea were found in 5% of participant women.

During menstruation, 160 women (26.7%) used 5 or more pads, 254 women used (42.3%) big size pads and 233 women (38.8%) defined menstrual blood on their underwear. And, when the pictorial scores of the participants were evaluated, only 36.3% of participants had a score lower than 50. These results point to the importance of poorly defined heavy menstrual bleeding among Turkish women.

The fact that 79% of women using 5 or more pads during menstruation had a pictorial score greater than 50, 67% of women having blood on their underwear had a pictorial score greater than 50 and 76% of women using big sized pads had a pictorial score greater than 50 gives us the idea that pictorial blood assessment chart is a practical tool that may be suitable for clinical use although it is not a gold standard.

The gold standard 'alkaline haematin method' in the assessment of menstrual bleeding is difficult to employ and interpret. Pictorial blood assessment chart serves as a good and practical alternative in the evaluation of menstrual bleeding. The sensitivity and specificity of the method and the appropriate cut-off value for Turkish women are to be determined with futuer studies in this subject.

We recommend the use of the pictorial blood assessment chart as a means to help many women who suffer from heavy

menstrual bleeding and as a way to encourage health workers to give more attention to this neglected aspect of female health.

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