

Is There a Relationship between Mood Disorders and Dysmenorrhea?



Gülşah Balık MD, Işık Üstüner MD, Mehmet Kağıtçı MD*, Figen Kır Şahin MD

Department of Obstetrics and Gynecology, Recep Tayyip Erdoğan University School of Medicine, Turkey

ABSTRACT

Objective: Menstrual problems are common among adolescent females. Mood changes are related to menstrual problems (menorrhagia, dysmenorrhea, and abnormal menstrual cycle length). The aim of this study was to determine the relationship between depressive symptoms, anxiety, and premenstrual syndrome (PMS) with dysmenorrhea in adolescent girls.

Methods: A total of 159 adolescent girls (aged 13-19 y) with regular menstrual cycles presenting to the gynecology clinic with any complaints were included in the study during April-May 2013. All of the participants filled up the sociodemographic data collection form, FACES Pain Rating Scale, Beck anxiety inventory (BAI), Beck depression inventory (BDI), and a questionnaire form on criteria for PMS. Mann-Whitney U and chi-square tests were used to analyze the data.

Results: The prevalence of dysmenorrhea was 67.9%. The mean BAI and BDI scores of the patients were 13.64 ± 12.81 and 11.88 ± 10.83 , respectively. Statistically significant differences were observed between patients and control groups on the BAI and BDI scoring ($P < .05$). At least 1 of the symptoms of the PMS was detected in all of the participants and 29 (18.2%) of them were diagnosed as premenstrual dysphoric disorder (PMDD). The mean BAI score of the patients with PMS and PMDD were 9.65 ± 9.28 and 21.31 ± 15.75 , respectively. The mean BDI score of the patients with PMS and PMDD were 8.39 ± 8.62 and 19.1 ± 11.85 , respectively. Statistically significant differences were observed between PMS/PMDD and BAI/BDI scoring ($P = .00$).

Conclusion: Adolescent girls with dysmenorrhea have an increased risk of depression and anxiety. These results of our study are significant in emphasizing the importance of a multidisciplinary approach to primary dysmenorrhea follow-up and treatment.

Key Words: Dysmenorrhea, Anxiety, Depression, Psychological symptoms, Adolescent girls

Introduction

Adolescence is a transitional period from childhood to adulthood. Many physical, emotional, mental, and endocrinological changes occur in this period. Although menstruation is a natural phenomenon, major psychological changes start with menarche. Menstrual problems are common among adolescent females. Mood changes are related to menstrual problems (menorrhagia, dysmenorrhea, and abnormal menstrual cycle length).

Dysmenorrhea, which is a common symptom during menses in adolescent girls,¹ is the feeling of intense menstrual pain and cramps. Primary dysmenorrhea is painful menses in women with normal pelvic anatomy, usually begins during adolescence. Women with severe menstrual pain experience dull, throbbing, aching, crampy pain in the lower abdomen, back, or thighs. Fatigue, vomiting, weakness, nausea, diarrhea, headaches or light-headedness may also occur.² Recurrent and chronic menstrual pain causes poor school performance and psychological damage.¹

Premenstrual syndrome (PMS) is defined as recurrence of negative psychological (eg, irritability), physical (eg,

headaches), and behavioral (eg, fatigue) symptoms. PMS is common among adolescent girls. One or more PMS symptoms occur in 85% of women with menstruation.³ Changes in the premenstrual period negatively affect success at school, emotional well-being, social activities, and family relationships of these young girls.⁴ Determination of risk factors for dysmenorrhea is important because the condition affects a large proportion of women, reduced quality of life and contributes to lost work time. The most prevalent conditions are anxiety disorders with and without depression. Anxiety and depression occur in both genders, but during puberty, girls are at much higher risk than boys.⁵ In addition, both smoking and mood fluctuations are associated with menstrual symptoms.⁶

Premenstrual and menstrual problems are becoming more common due to increased awareness. The purpose of this study was to determine the relationship of dysmenorrhea with depressive symptoms, anxiety, and PMS in adolescent girls.

Materials and Methods

A total of 159 adolescent girls (aged 13-18 y) with regular menstrual cycles presenting to the gynecology clinic with any complaints were included in the study between April-May 2013. The diagnosis of primary dysmenorrhea was based on self-reporting of severely painful cramps just before or during menstruation without pelvic pathology.

The authors indicate no conflicts of interest.

* Address correspondence to: Mehmet Kağıtçı, MD, Department of Obstetrics and Gynecology, Recep Tayyip Erdoğan University School of Medicine, Islampaşa Mahallesi, Sehitler Caddesi, No: 74, Rize; Phone: +90 464 2130491; fax: +90 464 2170364

E-mail address: mehmetkagitci1@hotmail.com (M. Kağıtçı).

Primary dysmenorrhea was confirmed after the exclusion of secondary dysmenorrhea by pelvic examination, imaging studies (ultrasonography) and laboratory studies. The control group consisted of healthy volunteers.

Height, weight, menstrual cycle, place of residence, and family structure were recorded. All symptoms including abdominal pain, back pain, irritability, weakness, dizziness, nausea, vomiting, and diarrhea during menstruation were recorded. The questions on the participants' menstrual pattern concerned their age at menarche, duration of the most recent menstruation intervals (<21, 21–35, >35 days, or variable), average days of bleeding (short bleeding periods of <4 days, normal periods of 4–6 days, long periods of >6 days), and any menstrual problems and their frequency. The participants completed a sociodemographic data collection form, FACES Pain Rating Scale, Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), PMS, and premenstrual dysphoric disorder (PMDD) criteria forms. All volunteers completed the questionnaire forms in the clinic during their menstrual period.

Tests and Questionnaires and their Evaluations

1. Sociodemographic data collection form: Sociodemographic questionnaire gathered information about the participants' age, weight, height, body mass index, family structure, smoking, drugs status, and psychiatric disorders.
2. PMS Diagnosing: PMS is a disease accompanied by behavioral, emotional, and physical symptoms that occur for several days to weeks before menses and decline or disappear following the menstrual period. Symptoms include sleep disturbances, swelling, breast tenderness, irritability, appetite changes, mood swings, poor concentration, anxiety/tension, aches, decreased interest, bloating/weight-gain, depression, headache, feeling out of control, and social withdrawal. The presence of any of these complaints for at least 2 days of the luteal phase was considered as a sign of PMS.⁷
3. PMDD questionnaires: PMDD questionnaire consists of 11 symptoms according to the DSM-IV and participants should have at least 5 symptoms of this questionnaire (with at least 1 being from the 4 first symptoms) that should be present a week before menses and remit a few days after the onset of menses. The subjects who were expected to have PMDD according to this questionnaire were assessed for at least 2 prospective menstrual cycles through completing the daily record of severity of PMDD problems scale. For PMDD diagnosis, symptoms include depressed mood, fatigue, anxiety/tension, appetite changes/food cravings, mood swings, insomnia/hypersomnia, irritability, feeling out of control, decreased interest, physical symptoms, and concentration difficulties.⁷
4. Faces Rating Scale: The Wong-Baker FACES Pain Rating Scale is a pain scale that was developed by Donna Wong and Connie Baker.⁸ The scale shows a series of faces ranging from a happy face at 0 “No hurt” to a crying face at 10 “Hurts worst.” The patient must choose the face that best describes how they are feeling.

5. Beck Depression Inventory: Individual questions of the BDI assesses mood, sense of failure, pessimism, irritability, crying, social withdrawal, guilt, self-dissatisfaction, work difficulties, punishment, weight loss, appetite, suicidal ideas, self dislike, self-accusation, body image, insomnia, fatigue, bodily pre-occupation, and loss of libido. Each response is assigned a score, ranging from 0 (not at all bothered) to 3 (severely bothered), indicating the severity of the symptoms. The 1979 version of the BDI was adapted to Turkish by Hisli in 1988. For the Turkish population, a score of 17 or above indicates depression, according to Hisli.⁹ We used these cut-off scores to determine the levels of depression.
6. Beck Anxiety Inventory: The BAI is a 21-item self-report questionnaire that lists symptoms of anxiety. The symptoms are rated on a 4-point scale, ranging from “not at all” (0) to “severe” (3). Respondents rate the extent to which each symptom has bothered them in the past month, ranging from 0 (not at all) to 3 (severe, I could barely stand it). Total scores range from 0 to 63 with scores of ≥ 16 indicating moderate to severe levels of anxiety. 13 items assesses the physiological symptoms, 5 items describe the impaired cognitive functioning and 3 items assess both somatic substance and symptoms of impaired cognitive functioning. Increase of the total score shows the severity of anxiety. Its reliability and validity in Turkey was carried out by Ulusoy et al in 1988.¹⁰

Written informed consent was obtained from each participant prior to the enrolment for the study. Ethical approval was obtained from the local ethical committee.

Statistical Analysis

Statistical analyses were performed using the SPSS for the Windows version 17.0 program. Mann Whitney U and chi-square tests were used to analyze the data. A value of $P < .05$ was considered statistically significant.

Results

The study had 159 participants, of whom 51 (32%) of 159 were in the control group and 108 (68%) were in the patient group. The mean age of the participants was 17.74 ± 1.33 years (range 13–19). Between the 2 groups, there was no statistically significant difference in age ($P > .05$). A statistically significant difference between 2 groups was observed for smoking ($P < .05$) (Table 1). The mean FACES pain rating scale score of the patient group was 6.41 ± 2.36 (2–10). The demographic features of the participants are shown in Table 1.

The coexisting symptoms with menstruation are shown in Table 2. The most prevalent of these was weakness, which was followed by backache, nausea, and vomiting.

Statistically significant differences were observed between patients and control groups on BAI and BDI scoring ($P < .05$); see Table 3.

At least 1 of the symptoms of the PMS was detected in all of the participants and 130 (81.8%) of them were diagnosed as

Download English Version:

<https://daneshyari.com/en/article/3965061>

Download Persian Version:

<https://daneshyari.com/article/3965061>

[Daneshyari.com](https://daneshyari.com)