

The Treatment of Dysmenorrhea



Sheryl A. Ryan, MD

KEYWORDS

- Adolescent • Menstrual problems • Dysmenorrhea • Menorrhagia
- Excessive uterine bleeding

KEY POINTS

- The time between menarche and the establishment of ovulatory menstrual cycles is variable but may take as long as 2 to 4 years.
- Primary dysmenorrhea is a clinical diagnosis rarely requiring extensive diagnostic tests and is generally responsive to graded management using nonsteroidal anti-inflammatory drugs (NSAIDs) and combined oral contraceptives.
- Excessive uterine bleeding can be seen as a consequence of physiologic anovulation from an immature hypothalamic-pituitary-gonadal axis but when it occurs soon after menarche bleeding diathesis must be considered.
- When evaluating dysmenorrhea, the history and physical examination provide important clues to etiologic factors and guide the diagnostic evaluations that may be needed.
- Evidence is available to support the use of both NSAIDs and hormonal treatments for the management of primary dysmenorrhea.

INTRODUCTION

Menstrual disorders and abnormal uterine bleeding are common concerns that bring young women to the physician's office. Complaints include menses that are too painful (dysmenorrhea), are absent or occur irregularly (amenorrhea or oligoamenorrhea), or are prolonged and heavy (menorrhagia, or excessive uterine bleeding). In providing optimal reproductive care to these adolescents, the medical provider must be able to distinguish normal developmental patterns or symptoms requiring education and reassurance from pathologic conditions requiring prompt assessment and treatment. This article is a discussion of the normal menstrual patterns seen in adolescent females with an evaluation and management approach to primary and secondary dysmenorrhea.

The author declares that she has no financial conflicts of interest related the preparation or content of this article.

Section of Adolescent Medicine, Department of Pediatrics, Yale University School of Medicine, PO Box 208064, 330 Cedar Street, New Haven, CT 06520, USA

E-mail address: Sheryl.ryan@yale.edu

Pediatr Clin N Am 64 (2017) 331–342
<http://dx.doi.org/10.1016/j.pcl.2016.11.004>

pediatric.theclinics.com

0031-3955/17/© 2016 Elsevier Inc. All rights reserved.

NORMAL MENSTRUAL PATTERNS IN ADOLESCENTS

Normal menstrual cycles require the maturation of the complex feedback system of the hypothalamic-pituitary-gonadal (H-P-G) axis. The mature system involves orderly and sequential release from the pituitary of luteinizing hormone (LH) and follicle-stimulating hormone (FSH), in response to gonadotropin-releasing hormone from the hypothalamus. This results in the growth and maturation of follicles in the ovary, oocyte maturation, and estrogen and progesterone secretion. In the initial follicular phase of a normal menstrual cycle, increasing levels of FSH stimulate the maturation of an ovarian follicle as well as the secretion of estrogen. Estrogen, in turn, stimulates endometrial proliferation. In an ovulatory midcycle, the rising level of estrogen switches from a negative feedback mechanism on both LH and FSH to a positive mechanism. The resulting surge of LH precipitates the release of an oocyte from a mature follicle. The second half of the menstrual cycle, the luteal phase, is characterized primarily by secretion of progesterone as well as estrogen by the corpus luteum formed by the residual follicle. This results in falling levels of FSH and LH, and some additional growth but also stabilization of the thickened endometrium. In the absence of pregnancy and implantation, after about 10 to 14 days, the corpus luteum involutes, and estrogen and progesterone levels decline, resulting in endometrial shedding, or menstruation. In most adult women, this cycle averages 28 days but can vary from 24 to 35 days and typically lasts 4 to 6 days.

Ovulatory menstrual cycles occur at varying rates following menarche. Within 2 years of menarche, 18% to 45% of female patients will have established regular ovulatory cycles. This increases to 45% to 70% by 2 to 4 years following menarche and to 80% by 5 years.¹ Dysmenorrhea generally occurs during ovulatory cycles, explaining why most dysmenorrhea in adolescents usually has onset 6 to 12 months following menarche. Dysmenorrhea can occur less frequently, however, even with anovulatory cycles. Studies have shown that girls who experience menarche earlier generally establish ovulatory cycles within a shorter time than those girls whose menarche occurs later in age.²

Before the establishment of ovulatory cycles, follicular development that does not result in ovulation still can produce levels of estrogen that stimulate endometrial proliferation. Eventually the negative feedback effect of this level of estrogen will reduce gonadotropins, resulting in falling levels of estrogen and a withdrawal bleed. In this situation, the lack of progesterone to stabilize the endometrium can result in cycles that are prolonged and excessive. This anovulatory excessive bleeding is physiologic and will usually resolve with maturation of the H-P-G axis and the establishment of ovulatory cycles.

Typical parameters for uterine bleeding considered to be excessive include a duration lasting more than 7 days, reports of perceived flow that is heavier than normal (quantified as more than 80 mL/cycle), cycles occurring less than every 24 days or more than 35 days, and any bleeding between normal cycles.^{3,4}

Dysmenorrhea, or painful menses, is a commonly experienced symptom in women of reproductive age. When severe enough, it can result in restrictions in normal functioning, such as attending school or work. There are 2 commonly defined categories of dysmenorrhea: primary and secondary. Primary dysmenorrhea refers to pain during menses in the absence of any specific pathologic state and is characterized by recurrent, crampy, bilateral lower abdominal pain. Secondary dysmenorrhea refers to pain during menses that can be explained by an organic pathologic condition or any disorder that is determined to be responsible for the reported symptoms of pain with menstruation.

Download English Version:

<https://daneshyari.com/en/article/5720233>

Download Persian Version:

<https://daneshyari.com/article/5720233>

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