

Menorrhagia at menarche: A case report

Nuray Ö Kanbur, MD¹, Orhan Derman, MD¹, Tarık Aksu, MD², Mehmet Özsarı, MD¹, and Tezer Kutluk, MD¹

¹*Department of Pediatrics, and* ²*Department of Obstetrics and Gynecology, Hacettepe University Faculty of Medicine, Ankara, Turkey*

Abstract: Dysfunctional uterine bleeding is defined as abnormal endometrial bleeding without any underlying disease. It is particularly a common problem for adolescents and a majority are caused by immature hypothalamic-pituitary-ovarian axis. Usually, it presents as minor alterations of the cycle flow length, but occasionally can be severe enough to require hospitalization. A 12 year-old girl with menorrhagia at menarche was admitted to our Adolescent Unit. She had heavy bleeding for 16 days causing a hemoglobin level of 5.5 gr/dl. She was first treated with blood transfusion and hemostasis was achieved rapidly through high doses of combination oral contraceptives. Whenever menorrhagia occurs at menarche, it is important to exclude an underlying hematologic disease. If there is no response to hormonal therapy in 48 hours there is a need for reevaluation of coagulopathy. In this report, we show how an acute and heavy anovulatory bleeding episode can be controlled and followed-up in an adolescent girl.

Keywords: Menorrhagia, menarche, adolescent, Turkey

Correspondence: Nuray Ö Kanbur, MD, Adolescent Unit, Department of Pediatrics, Hacettepe University, Faculty of Medicine, Ankara, Turkey. Phone: 0-312-3051160 / 0-312-3052022. Fax: 0-312-3243284. E-mail: meatabek@mynet.com

Submitted: June 25, 2002. **Revised:** June 29, 2002. **Accepted:** June 30, 2002

INTRODUCTION

Abnormal uterine bleeding may be characterized by excessive bleeding during the menstrual period (menorrhagia), by frequent and irregular bleeding (metrorrhagia), or a combination of both (menometrorrhagia) (1). Dysfunctional uterine bleeding (DUB) is defined as abnormal endometrial bleeding without organic pathology or medical illness (2). Although abnormal uterine bleeding may occur in women at all ages, it is a particularly common issue for adolescents (1). As many as 95% of cases of abnormal vaginal bleeding in adolescents are caused by DUB (3), but diagnosis of DUB remains a diagnosis of exclusion, and other potential causes must be investigated. Although the majority of adolescents presenting with abnormal vaginal bleeding have anovulatory bleeding caused by an immature hypothalamic-pituitary-ovarian

axis, one must consider other severe causes. These may include pregnancy, pathologies of the uterus or vagina, endocrine or other systemic disorders, and coagulopathies (1).

Dysfunctional uterine bleeding and irregular or delayed periods are more common during the first year or so following menarche and are usually related to lack of regular ovulation. The interval between onset of menses and regular, ovulatory periods seems to be associated with age at menarche: If menarche occurs at earlier than 12 years of age, 50% of periods may be ovulatory after one year, whereas if menarche is between 12 and 13 years of age, it may take three years before 50% of periods are ovulatory, and if menarche is after 13 years of age, it may be 4.5 years until 50% of periods are ovulatory (4).

In this report, we present a case with severe DUB, menorrhagia at menarche