

Menstrual Disorders in Adolescents

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Menstrual disorders are among the most common complaints in adolescent girls. For menstrual irregularities, the use of the term Abnormal Uterine Bleeding (AUB) is recommended by The International Federation of Gynecology and Obstetrics (FIGO). AUB is defined as uterine bleeding that is abnormal in duration, volume, frequency and/or regularity [1]. Though serious pathology is rare, AUB may significantly affect everyday activity and decrease quality of life [1,2]. The causes of AUB can be classified using the PALM-COEIN classification proposed by FIGO. PALM stands for structural causes (Polyp, Adenomyosis, Leiomyoma, Malignancy and Hyperplasia), which are very rare, appearing in 1.3%–1.7% of adolescents [1]. COEIN stands for non-structural causes (Coagulopathy, Ovulatory dysfunction, Endometrial, Iatrogenic and not yet classified). Ovulatory dysfunction (anovulatory cycles), which results from immaturity of the hypothalamic–pituitary–ovarian regulation, is the most common cause of AUB in adolescents [1]. In the first two years after menarche, about half of menstrual cycles are anovulatory, and after 5 years 75% of the cycles are ovulatory [3]. Earlier age of menarche is associated with earlier ovulatory maturation [3]. Another cause for chronic anovulation is hyperandrogenism as in PCOS. Diagnostic criteria for PCOS in adolescents are controversial because the pathological features used in adults may be physiological during puberty [4]. Suggested criteria for the diagnosis of PCOS are divided into required (irregular menses/oligomenorrhea, biochemical and/or clinical hyperandrogenism), optional (polycystic ovarian morphology, severe cystic acne) and not recommended (obesity, hyperinsulinemia, etc.). Those criteria should be used 2 years post-menarche and when other causes of hyperandrogenism (non-classical CAH, etc.) have been ruled out [4]. Basic investigations in AUB include complete blood count, thyroid function, prolactin, androgens, etc. Bleeding disorders could account for 10%–47% of the cases with heavy uterine bleeding (HUB) and, in such cases, a consultation with haematologist is appropriate [2]. Pelvic ultrasound is not recommended as a first-line investigation because structural causes for AUB are very rare in adolescents [2,5]. There are several therapeutic options in adolescents with AUB. As in most cases no medical cause for AUB is found, reassurance and advice about simple measures are important. Oral progestogens or combined oral contraceptive pills (COCP) can be used as first-line treatment when medication is needed. The main risk with COCP is venous thromboembolism (VTE) but the background

risk of VTE in adolescent girls is very low [2]. In conclusion, menstrual disorders in adolescents are common and though serious pathologies are rare, they may significantly affect quality of life.

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