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REVIEW

Differential diagnosis and management of abnormal uterine bleeding due to hyperprolactinemia



Abdallah Adra ^a, Mazen Yousef El Zibdeh ^b, Abdul Malek Mohammed Abdul Malek ^c, Amir H. Hamrahian ^d, Amr Mohamed Salaheldin Abdelhamid ^{e,f}, Annamaria Colao ^g, Elie Anastasiades ^{h,i}, Essam Moustafa Aboul Fetooah Ahmed ^j, Jihad Ibrahim Ezzeddine ^k, Mahmoud Ibrahim Abd El Sattar ^l, Suleiman Tawfiq Dabit ^m, Wadih Ghanameh ⁿ, Navid Nedjatian ^o, Faysal El-Kak ^{a,*}

^a Department of Obstetrics and Gynecology, American University of Beirut, Beirut, Lebanon

^b Garden's Hospital, Amman, Jordan

^c Specialty Hospital, Amman, Jordan

^d Cleveland Clinic Abu Dhabi, Abu Dhabi, United Arab Emirates

^e Ain Shams University, Cairo, Egypt

^f Al Hendawy Medical Center, Abu Dhabi, United Arab Emirates

^g Dipartimento di Medicina Clinica e Chirurgia, Università degli Studi di Napoli Federico II, Naples, Italy

^h Department of Obstetrics & Gynaecology, Balamand University, Beirut, Lebanon

ⁱ St. George Hospital, Beirut, Lebanon

^j Hadi Hospital, Kuwait

^k Makassed General Hospital, Beirut, Lebanon

^l Al Rashid Hospital, Kuwait

^m Al Khalidi Medical Center, Amman, Jordan

ⁿ Notre Dame de Secours University Hospital, Byblos, Lebanon

^o Medical Department, Pfizer Gulf and Levant States, Dubai, United Arab Emirates

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KEYWORDS

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Abstract Abnormal uterine bleeding may be acute or chronic accounting for up to 30% of outpatient visits to gynecologists. Hyperprolactinemia is one of the most common endocrine disorders associated with ovulatory dysfunction that results in menstrual irregularities. Prior to initiating treatment, the various causes (physiologic, pathologic, pharmacologic, or idiopathic) of

* Corresponding author at: Department of Obstetrics & Gynecology, American University of Beirut, PO Box 11-0236, Riad El-Solh 1107 2020, Beirut, Lebanon. Tel.: +961 1 35000x4672; fax: +961 1 370829.
E-mail address: fk01@aub.edu.lb (F. El-Kak).

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Prolactinoma;
Dopamine agonists

hyperprolactinemia must be elucidated. Prolactin is a stress hormone that increases in response to stressful conditions; therefore, while collecting samples it is necessary to reduce venipuncture stress. A thorough patient history and physical examination will help to identify the cause and to direct therapy. Imaging results must always be assessed along with a patient's clinical history and biochemical parameters when a pituitary tumor is suspected. Magnetic resonance imaging is the method of choice for the diagnosis of microprolactinomas and macroprolactinomas in both initial assessment and follow-up. Several drugs may cause a significant increase in serum prolactin concentration. If clinically feasible, the drug should be discontinued; if this is not possible, it should be substituted with a drug of similar action that does not cause hyperprolactinemia. Prolactinomas are the most common cause of pituitary adenomas affecting women of fertile age leading to significant elevations in prolactin that warrant treatment. Idiopathic hyperprolactinemia may be observed in the presence of elevated serum prolactin levels and in the absence of any other recognized cause of increased prolactin secretion. Dopamine agonists are the mainstay of therapy in prolactinomas and symptomatic idiopathic hyperprolactinemia because they normalize serum prolactin, effectively shrink prolactinomas and normalize gonadal function (i.e. menstruation).

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1. Introduction

Abnormal uterine bleeding (AUB) may be acute or chronic, and is defined as bleeding from the uterine corpus that is abnormal in regularity, volume, frequency, or duration, occurring in the absence of pregnancy (1). Up to 14% of women experience irregular or excessively heavy menstrual bleeding (2). Disorders of the menstrual cycle are a common problem

in ambulatory medicine, accounting for up to 30% of outpatient visits to gynecologists (3). A study found that, of 20.1 million visits to physicians, menstrual complaints accounted for 19.1% of the visits (4).

Abnormal uterine bleeding not only puts a heavy economic burden on society (5) but also significantly impacts health-related quality of life (5,6). Although additional research is required, the conservatively estimated annual direct and

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