

Perspectives on “Abnormal uterine bleeding— an international agreement on terminologies and definitions”

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Abstract Abnormal uterine bleeding (AUB) is a common reason for a woman to present at her gynaecologist. In this issue of Gynecological Surgery, a new terminology for AUB is proposed. The terminology used at present is not accurate for the characterisation of a normal menstruation. The need for a consensus on the nomenclature and the clinical application of the terms describing AUB is urgently needed.

Keywords Abnormal uterine bleeding · Terminology

Background

A uniform description of patients' symptoms will give comparable data and is a key factor to improved effectiveness and efficacy in health care. Via the linkage of shared terms and concepts, patient data can be uniformly tabulated. This will increase the possibility to compare treatment results across borders and can help in the development of new medical knowledge.

The definition for clinical terminology is as follows [1]:

Standardized terms, and their synonyms, which record patients findings, circumstances, events, and interventions with sufficient detail to support clinical care, decision support, outcome research, and quality improvement; and can be efficiently mapped to broader classifications for administrative, regulatory, oversight, and fiscal requirements.

Terminology is a convenient nickname which can mean a lot or have almost no meaning. Terminology should include the entire problem, such as: classification, nomenclatures, language labels and concepts.

The purpose of formalised nomenclature is to enable clinicians to use a set of defined terms. These terms should correspond to formal concepts organised by a classification schema.

Abnormal uterine bleeding (AUB) can be classified as either a systemic, iatrogenic or local disorder. It may occur as a result of pregnancy, local or systemic defect of the haemostasis or structural pathology (i.e. myomas, adenomyosis, neoplasm). If no known cause is found, the term dysfunctional uterine bleeding (DUB) may be applied. DUB can be found in women with or without ovulation (anovulatory DUB). This abnormality may even be present together with asymptomatic myomas or endometrial polyps. DUBs are not uniformly defined and the term is used with several different meanings by clinicians, i.e. as symptoms, signs or diagnosis.

The English terms *amenorrhea*, *oligomenorrhea*, *polymenorrhea*, *metrorrhagia*, *menorrhagia*, *menometrorrhagia* and *hypermenorrhea*, are extensively used to describe different abnormalities of menstrual bleeding. The medical subject headings for AUB are classified by the National Library of Health. The term menorrhagia belongs to two categories. In one category, it is ranked as a uterine disease, while in another, it refers to a symptom or a sign. The International Classification of Disease (ICD) has 16 (ICD-10) codes for AUB. It involves three main categories: (i) excessive, frequent and/or irregular menstruation; (ii) absent, scanty and rare menstruation; (iii) other abnormal uterine and vaginal bleeding. The present incomplete characterisation of the term AUB causes inconsistent assortment in the categories. The term has no uniform

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simple nomenclature classification and it is not substantiated by pathophysiological description.

Summary of the process

The aim was to develop a clinical standardised terminology that could be accepted globally. First, a group of 35 experienced clinicians and scientists from around the world, experts in the field, were brought together. The panellists were selected to represent the international community of obstetrician-gynaecologists and related clinicians and scientists, with participants from developing as well as developed countries.

Secondly, consensus was developed among the panel of experts, by use of the modified Delphi technique, which is a formal method used for group consensus. This process was organised by a specialised team with extensive experience of the technique. The process started with an open questionnaire to be filled out by each expert. The aggregate ratings were then shared with the entire group at a face-to-face meeting. After discussion, the panellists re-rated each item. In subsequent rounds, the participants were asked to rate the relative importance of specific items. After subsequent rounds, consensus was finally developed.

The differences in the interpretation of commonly used terms were obvious already from the start. An international nomenclature for what is normal was needed and the group reached consensus on the four key terms, including the frequency of menses, regularity of menses, duration of flow and volume of monthly blood loss. A normal range for each term was established based on previous studies.

One of the main agreements of the consensus conference was that the menstrual terminology of the English language was ill-defined. These terms should be discarded and, instead, simple descriptive terms that could be understood by ordinary women and translated into most languages should be used. Four areas needed further description: cycle regularity, menstrual period frequency, duration of flow and volume of flow. These four areas require more explicit inquiry in a structured clinical history and simple key words should be used to describe the most important features (e.g. “heavy, irregular menstrual bleeding”).

Main advantages

Definition of normality

This is the first uniform consensus on what to define as normal and abnormal. Several population studies have established the definition of normal bleeding (5th to 95th

percentiles). The new terminology defines normal ranges for the four main features of uterine bleeding (regularity, frequency, duration and volume). It seems obvious that all four aspects of bleeding should be normal to represent normality. The ICD-10 codes used at present include several abnormal aspects of bleeding but not the four main features for normal bleeding. The differences are outlined in Table 1 (old terms and new terms). Normal values for cycle frequency, cycle length and cycle variation are based on structured questionnaires and interviewing, while normal ranges for the volume of bleeding are based on assessment of the menstrual bleeding volumes.

A structured interview using standardised documentation of bleeding problems should be performed to define whether the four main features are normal or abnormal and should be followed by a quantification of the problem. Does it affect the daily quality of life and, if so, how? Although some studies have shown that patients with heavy bleeding, defined as bleeding volume of more than 80 ml, could not be identified without a bleeding assessment test, some studies have implicated that key questions in combination with measurements of serum ferritin could identify these patients quite accurately [2].

Common language today

The commonly used terminology includes translation to medical language that is understandable for medical professionals but not understandable for patients and in this translation, information might be lost. Furthermore, the terminology to describe different abnormalities is not uniformly defined by the doctors. Thus, the effort to translate common terms of bleeding problems to medical terminology not only results in the loss of information but it also seems to decrease the precision of the terminology that can distinguish between different bleeding problems. Even in the panel participating in this process, there was no consensus on the meaning of the prior terminology. The new nomenclature has the advantage of using words understandable to both patients and doctors. This could also help bring the communication of bleeding problems into a common frame of understandable terminology for both patients and doctors.

The factors instigating a woman to attend a specialist clinic for symptoms of abnormal uterine will always be the women’s own perception and understanding of her problem. When women complain of AUB, they may refer to changes in their prior bleeding pattern [3] and this bleeding pattern is only known by the patient. Bleeding complaints may either be heavy bleeding, cycle-related changes or pain. Most often, complaints are combinations of these parameters [4]. How women present their complaint to doctors seems to depend on the severity of symptoms and

Table 1 Old and new terms of abnormal uterine bleeding (AUB)

Symptoms and signs					
Old terms (ICD-10)					
a) Polymenorrhagia	N92.0				
b) Normal	N92.0				
c) Oligomenorrhagia	N91.5				
a) Amenorrhagia	N91.2				
b) Regular	N92.6				
c) Metrorrhagia					
New terms					
1. Frequency (d)					
a) Frequent	<24				
b) Normal	24–38				
c) Infrequent	>38				
Normal ((b) 1–4)					
Abnormal (specified: 1–4 a-c) without exclusion of B, I, M, K, H, S					
Abnormal and evaluation: gynaecologic examination and/or ultrasound and/or hysteroscopy and/or blood test					
2. Regularity					
a) Absent	—				
b) Regular	Variation±2–20 days				
c) Irregular	Variation>20 days				
3. Duration of flow					
a) Prolonged	>8.0				
b) Normal	4.5–8.0				
c) Shortened	<4.5				
4. Volume of monthly blood loss (mL)					
a) Heavy	>80				
b) Normal	5–80				
c) Light	<5				
Pathophysiologic diagnosis:					
B. Benign organic disease of female genital organs	I. Infection (N70–N77)	M. Malignant neoplasms of female genital organs (C51–C58)	K. Abnormal coagulation (D65–D69)	H. Iatrogen (Y40–Y59) hormonal induced Y43	S. Systemic disease
Benign neoplasms (D25–28) Noninflammatory disorders (N80–N98)					
Myomas D25					
Adenomyosis N80.0					
Polyps N84					
Hyperplasia N85					
Unexplained vaginal bleeding with ovulation (exclusion of B, I, M, K, H, S)					
Vaginal bleeding with disturbed ovulation (exclusion of B, I, M, K, H, S)					

In the first few rows, old terms and their ICD-10 codes are given. They correspond to the new terminology given in the second row (1. frequency (d), 2. regularity, 3. duration of flow, 4. volume of monthly blood loss (mL)). a) and c) are abnormal, b) is normal. The new terms describe the bleeding problem without exclusion of B, I, M, K, H or S. B=benign organic disease, I=infection, K=abnormal coagulation, H=iatrogen, S=systemic disease

In abnormal cases, evaluation with gynaecologic examination, blood test, ultrasound etc. will gain a pathophysiologic diagnosis (B, I, M, K, I or S). These diagnoses with ICD-10 codes are shown in the next rows. By evaluation, most common diagnoses (B, I, M, K, H or S) should be confirmed or excluded. In the first column, some of the most common benign diseases are specified. A proper specific term is needed for unexplained vaginal bleeding, when most common diagnoses are excluded by evaluation. These cases might have ovulation or disturbed/absent ovulation

their impact on daily life [5] but also on the expectations of the doctor [6]. Therefore, communication between patients and doctors on bleeding problems may not result in a common understanding [4]. Often, the doctor and patients are not in concordance with what are the main problems. Doctors seem to interpret most bleeding problems as heavy bleeding [7], while the main problem for the patient may be other aspects of abnormal bleeding, such as pain, discomfort and premenstrual problems [4].

Future perspectives

This article clearly identified the need for a better terminology to describe AUB. The results could be biased, as the consensus panel represents a small number of physicians and the results may not be reproducible in general practice. The consensus group was mostly constituted by people with an interest in research. The main problem with the diverging nomenclature is that it makes research and development in the field difficult, and these problems are undoubtedly most evident for clinicians carrying out research. Moreover, the benefit of common terminology is obvious when you are treating cancer patients and the survival of the patient is the outcome. In AUB, the change of the terminology may improve minimally invasive treatment options, which is the major goal. Thus, better terminology may result in the survival of the uterus and improved life but it will not change the survival of the patient. Clinicians who are doing research in the field of AUB are now focussing on minimally invasive treatment but does the major medical society, associations, payers and governments agree in this aim?

Thus, the next step could be to evaluate whether there is consensus in a larger group of clinicians on the proposed terminology. Are the common clinicians aware of the problem? Only a few clinicians may be aware of the fact that doctors and women often use different terminology, as well as language, when they describe terms of abnormal bleeding.

Moreover, even if a better terminology exists, will the clinicians be willing to go through all of the confusions which will follow the introduction of new terminology? Will the clinicians change their habits and live with all of the disadvantages that the introduction of a new nomenclature will give?

A government or medical association initiated alteration in terminology will only be successful when clinicians accept the need for an alteration. The alterations should give meaning to the clinicians in their everyday lives and help in their decision making, quality improvement and not be changed due to administrative and regulative purposes.

From a clinician's point of view, an important improvement in terminology should include the whole modern concepts of AUB. Thus, this process should be continued

and completed not merely using a system for symptoms and signs but also for diagnosis. A modern evaluation of AUB with blood test, ultrasound or hysteroscopy should be followed by a "decision-treatment" logic pathophysiologic diagnosis. Implementation of a pathophysiologic description of the different subgroups of AUB should include a uniform description of diseases of female genital organs and common uterine causes: myomas, number, size and location, presence of adenomyosis, endometrial abnormalities, polyps and hyperplasia. Furthermore, systemic disease, coagulation disorders, ovulation and endocrine disturbances should also be included in a uniform simple classification and coding system (Table 1). A simple coding system which implements the four main issues of AUB should be developed. A change in the ICD-10 system, which corresponds logically with the new terms, may be needed.

Thus, this process has merely started and should be followed by a process of development of a simple pathophysiologic etiologic classification of abnormalities, along with room for new etiologic items. The whole terminology should include classification, nomenclatures, language labels and uniform concepts.

When a logic change of the overall terminology is completed, the alterations in terminology should be implemented. At this point, the advantage of a complete concept of a uniform simple up-to-date classification and coding system both for symptoms and diagnosis may be more evident. Thus, the benefit in decision making and quality improvement should be so obvious for clinicians that implementation could be simple.

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