Female Genital Mutilation

A Visual Reference and Learning Tool for Health Care Professionals

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Female genital mutilation comprises all procedures that involve partial or total removal of the external female genitalia or injury to the female genital organs for nonmedical reasons. Health care providers for women and girls living with female genital mutilation have reported difficulties in recognizing, classifying, and recording female genital mutilation, which can adversely affect treatment of complications and discussions of the prevention of the practice in future generations. According to the World Health Organization, female genital mutilation is classified into four types, subdivided into subtypes. An agreed-upon classification of female genital mutilation is important for clinical practice, management, recording, and reporting, as well as for research on prevalence, trends, and consequences of female genital mutilation. We provide a visual reference and learning tool for health care professionals. The tool can be consulted by caregivers when unsure on the type of female genital mutilation diagnosed and used for training and surveys for monitoring the prevalence of female genital mutilation types and subtypes.

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Female genital mutilation comprises all procedures that involve partial or total removal of the external female genitalia or injury to the female genital organs for nonmedical reasons.[1] According to the World Health Organization (WHO), female genital mutilation is classified into four types, subdivided

Box 1. World Health Organization Classification of Female Genital Mutilation

Type I: Partial or total removal of the clitoris* and/or the prepuce (clitoridectomy)
  Type Ia: Removal of the clitoral hood or prepuce only
  Type Ib: Removal of the clitoris* with the prepuce
Type II: Partial or total removal of the clitoris* and the labia minora, with or without excision of the labia majora (excision)
  Type IIa: Removal of the labia minora only
  Type IIb: Partial or total removal of the clitoris* and the labia minora
  Type IIc: Partial or total removal of the clitoris,* the labia minora and the labia majora
Type III: Narrowing of the vaginal orifice with creation of a covering seal by cutting and apposition the labia minora and/or the labia majora, with or without excision of the clitoris (infibulation)
  Type IIIa: Removal and apposition of the labia minora
  Type IIIb: Removal and apposition of the labia majora
Type IV: Unclassified
All other harmful procedures to the female genitalia for non-medical purposes, for example, pricking, piercing, incising, scraping and cauterisation

* In the World Health Organization classification, when there is reference to removal of the clitoris, only the glans or the glans with part of the body of the clitoris is removed. The body or part of the body and the crura of the clitoris remain intact as well as the bulbs, two other sexual erectile structures.[13]
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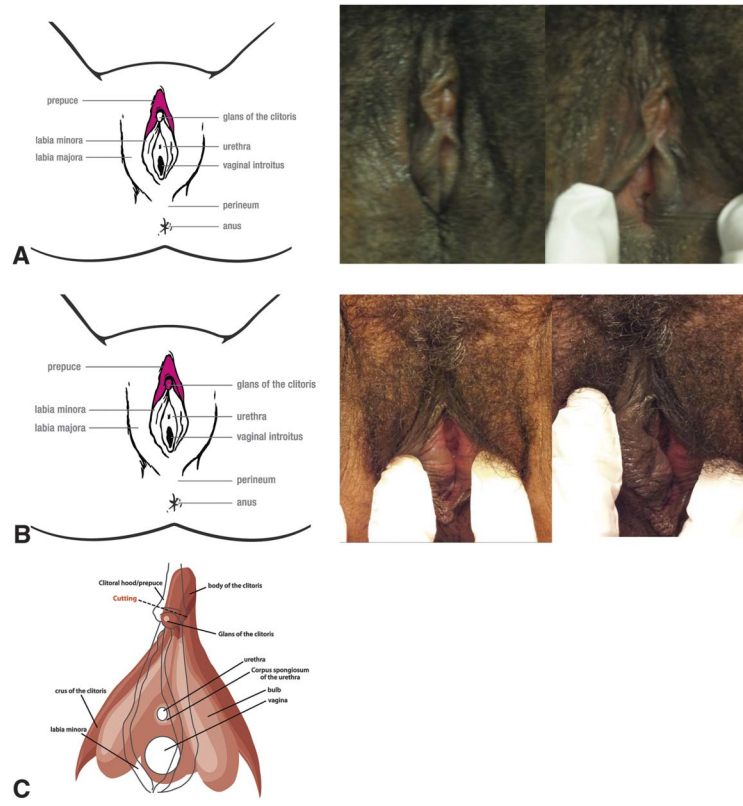

Fig. 1. Female genital mutilation type I: partial or total removal of the clitoris or the prepuce or both. **A**. Female genital mutilation type Ia: removal of the prepuce of the clitoris or clitoral hood (female circumcision). **B**. Female genital mutilation Ib: removal of the clitoris with the prepuce (clitoridectomy). In the World Health Organization (WHO) classification, when there is reference to removal of the clitoris, only the glans or the glans with part of the body of the clitoris is removed (**C**).[13] The recognition of type Ia can be difficult. As shown in **A**, an asymmetry of the prepuce can be noticed. Illustrations in panels **A** and **B** reprinted from: World Health Organization. WHO guidelines on the management of health complications from female genital mutilation. Geneva, Switzerland: World Health Organization; 2016. Copyright 2016.[14] Illustration in panel **C** modified from https://commons.wikimedia.org/wiki/File:Clitoris_anatomy_labeled-en.svg.

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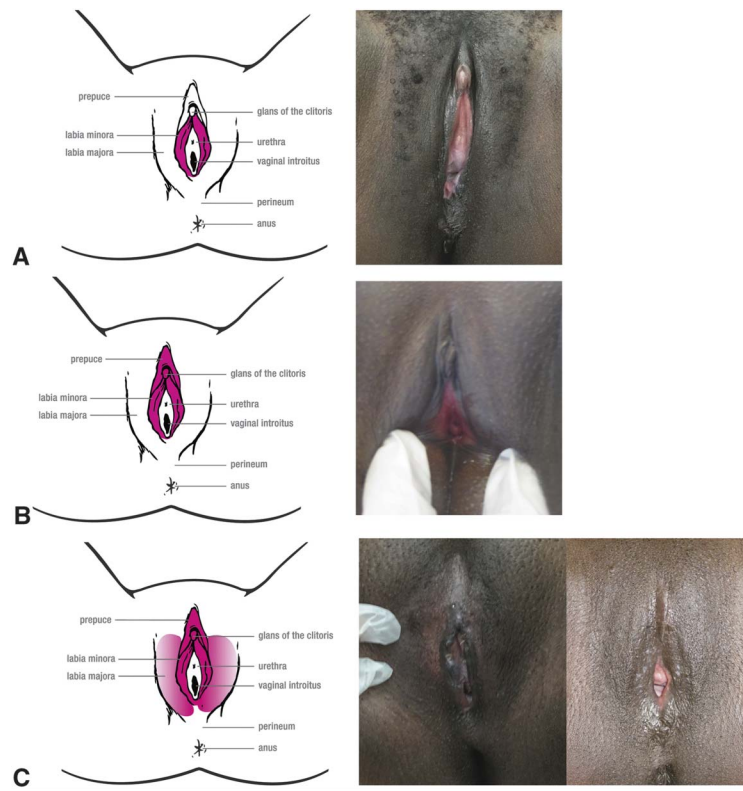

Fig. 2. Female genital mutilation type II: partial or total removal of the clitoris and the labia minora with or without excision of the labia majora (excision). **A**. Female genital mutilation type IIa: removal of the labia minora only. **B**. Female genital mutilation type IIb: partial or total removal of the clitoris and the labia minora. **C**. Female genital mutilation type IIc: partial or total removal of the clitoris, the labia minora, and the labia majora. In the World Health Organization (WHO) classification, when there is reference to removal of the clitoris, only the glans or the glans with part of the body of the clitoris is removed.[13] The examiner should be aware that the physiologic female anatomy of the labia minora can vary largely. The labia minora can physiologically overcome the labia majora or be asymmetric. Illustrations in panels (**A–C**) reprinted from: World Health Organization. WHO guidelines on the management of health complications from female genital mutilation. Geneva, Switzerland: World Health Organization; 2016. Copyright 2016.[14]

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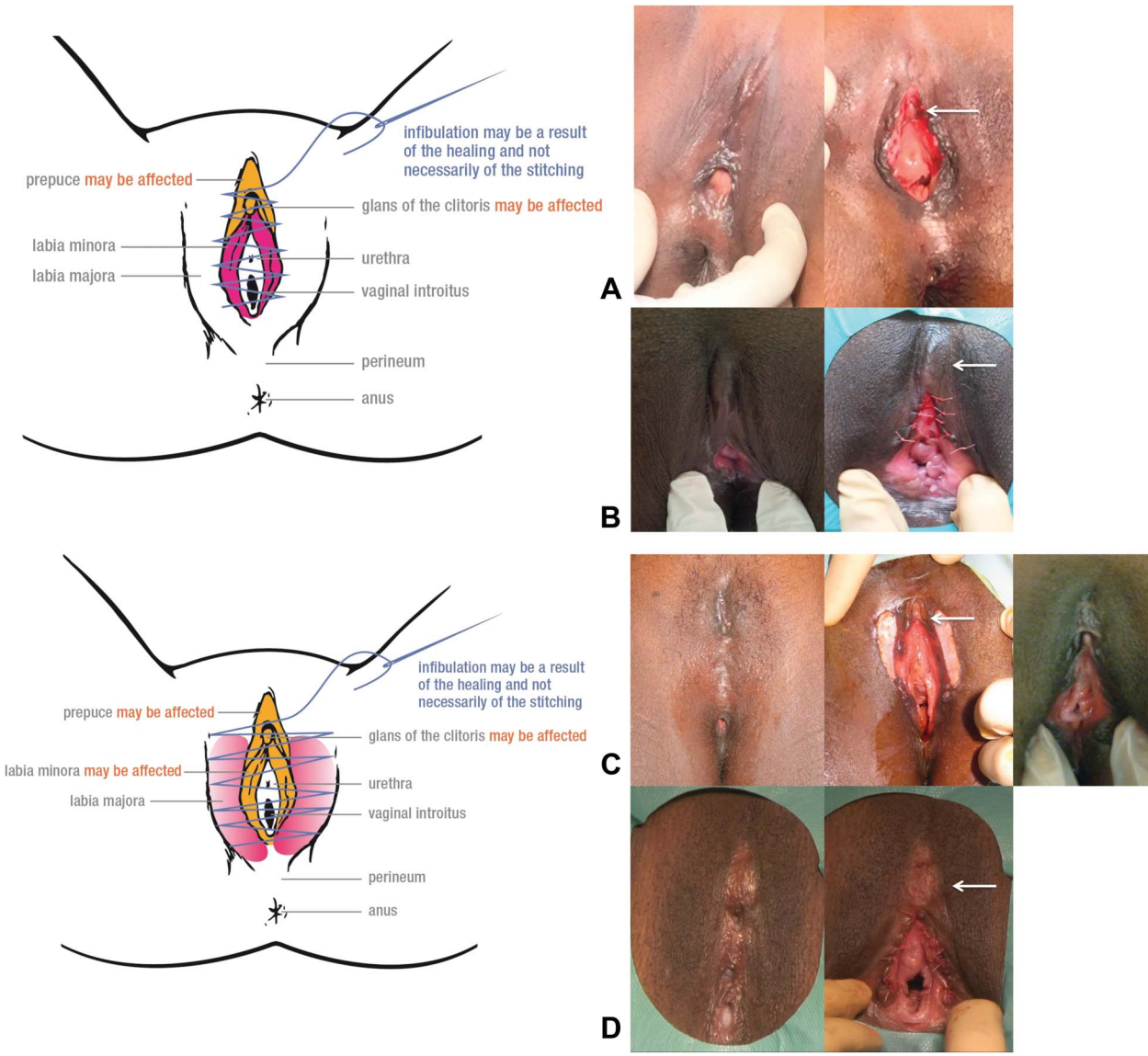

Fig. 3. Female genital mutilation type III: narrowing of the vaginal orifice with creation of a covering seal by cutting and appositioning the labia minora or the labia majora or both, with or without excision of the clitoris (infibulation). **A**. Female genital mutilation type IIIa without cutting of the clitoris before and after defibulation, the surgery that opens infibulation. *Arrow*: intact clitoris uncovered after defibulation. **B**. Female genital mutilation type IIIa with cutting of the clitoris before and after defibulation. *Arrow*: clitoral stump visible under the scar. **C**. Female genital mutilation type IIIb without cutting of the clitoris before and after defibulation. *Arrow*: intact clitoris uncovered after defibulation. **D**. Female genital mutilation type IIIb with cutting of the clitoris before and after defibulation. *Arrow*: clitoral stump visible under the scar. When the clitoris is excised, the clitoral stump is palpable and sometimes visible under the scar. When the clitoris is not excised, it lies under the scar and is re-exposed during defibulation. Illustrations reprinted from: World Health Organization (WHO). WHO guidelines on the management of health complications from female genital mutilation. Geneva, Switzerland: World Health Organization; 2016. Copyright 2016.[14]

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into subtypes (Box 1).[1] Female genital mutilation can be responsible for physical[2] and psychosexual[3] consequences. However, the available evidence on complications according to the female genital mutilation type and subtype is limited, in particular for type I. Most studies included all forms of female genital mutilation without looking separately at the consequences of each type. Obstetric complications have been found to be more associated with type II and type III.[4]

We provide a visual reference and learning tool for health care professionals based on the WHO

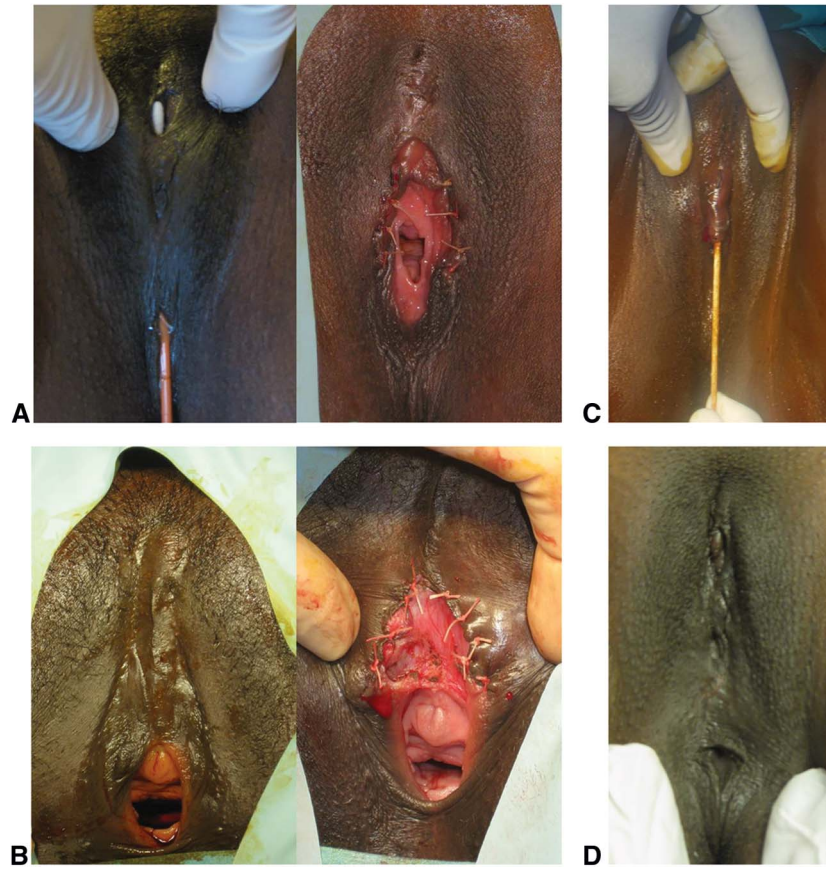

Fig. 4. Other examples of female genital mutilation type III. **A**. Female genital mutilation type IIIb without cutting of the clitoris before and after defibulation. **B**. Female genital mutilation type IIIb with cutting of the clitoris before and after defibulation. **C**. Female genital mutilation type IIIa. **D**. Female genital mutilation type IIIb. The same type–subtype can vary: as shown, the vaginal narrowing of infibulation can be more or less severe depending on the degree of the stitching of the labia. Also, some forms of female genital mutilation can fall between two types. In addition, the type can change during the life of the woman. Female genital mutilation type III can become female genital mutilation type II or I once opened (eg, surgically by defibulation or spontaneously after delivery). Female genital mutilation type II or I can become type III if the woman delivers in a country where postpartum re-infibulation is performed.

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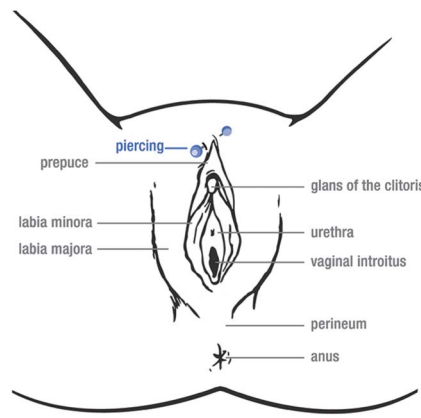
classification. An agreed-upon classification of female genital mutilation is important for clinical practice and management as well as for research on prevalence, trends, and consequences of female genital mutilation.[1,5] Health care providers for women and girls living with female genital mutilation have reported difficulties in recognizing, classifying, and recording female genital mutilation,[5–7] which can adversely affect treatment of complications and discussions of the prevention of the practice in future generations. Furthermore, recording and reporting female genital mutilation in minors has been made mandatory for caregivers in some countries,[8] making it is essential that the classification system is accurately applied.

Although some pictorial and training tools are available,[9–11] they are not in line with WHO's



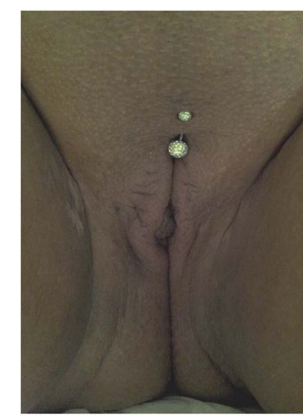


Fig. 5. Female genital mutilation type IV: unclassified. All other harmful procedures to female genitalia for nonmedical purposes, for example pricking, piercing (in the figure), incising, scraping, and cauterization. Illustration reprinted from: World Health Organization (WHO). WHO guidelines on the management of health complications from female genital mutilation. Geneva, Switzerland: World Health Organization; 2016. Copyright 2016.[14]

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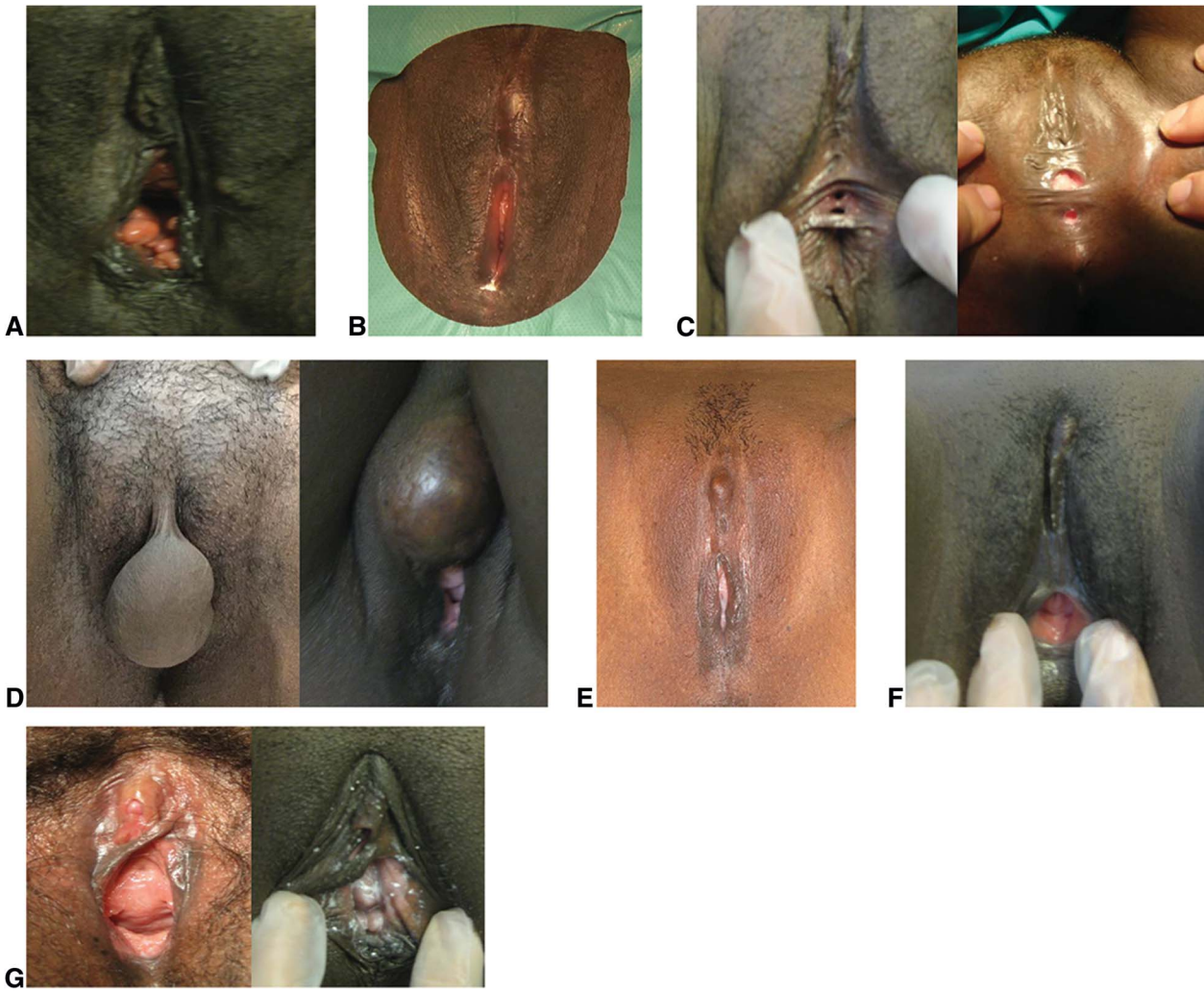

Fig. 6. Long term complications of female genital mutilation. **A.** Obstetric perineal complication. **B**. Fourchette's scar tissue resulting from recurrent perineal trauma during sexual intercourses. **C**. Obstructed, Rainy micturition. **D**. Epidermoid cysts. **E**. Neuroma of the clitoris. **F**. Hypertrophic scar or keloid. **G**. Bridles. Panel (**E**) is reprinted from: Abdulcadir J, Pusztaszeri M, Vilarino R, Dubuisson JB, Vlastos AT. Clitoral neuroma after female genital mutilation or cutting: a rare but possible event. J Sex Med 2012;9:1220–5. Copyright 2012, with permission from Elsevier.

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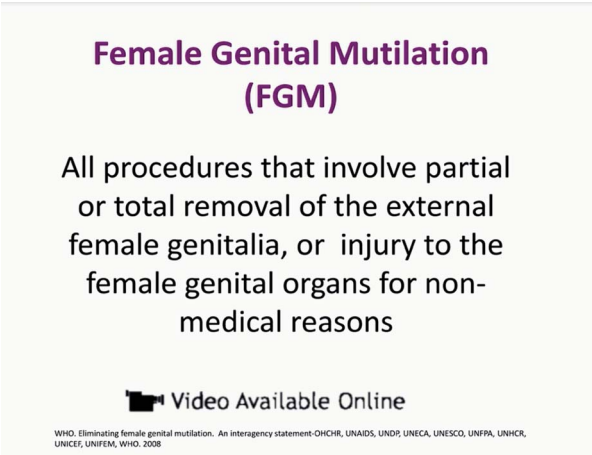
recommended classification. For example, *Netter's Obstetrics and Gynecology* has inaccuracies. It uses "female circumcision," "infibulation," and "female genital mutilation" synonymously. Also, type IV is illustrated as severe type III.[10] A different classification for female genital mutilation has been used by UNICEF in surveys among women. The UNICEF classification is as follows: 1) cut, no flesh removed, nicked; 2) cut, some flesh removed; 3) sewn, closed; 4) type not determined, not sure, or does not know.[11] Such classification has been proposed for surveys based on self-reporting. Women were not examined and used their own language to describe their genital cutting.[11] However, the type that is self-reported does not always correspond to the real form of female genital mutilation of the woman, who may be unaware that she is circumcised or of the type she has.[12] The WHO classification offers a more precise anatomical description, allowing for more precise recording and reporting of female genital mutilation by caregivers. This is important from an epidemiologic, clinical, surgical, and legal point of view.

The tool we present is a reference containing pictures and drawings of the different types and



Video 1. Video training for caregivers in accurate diagnosis of female genital mutilation. The authors thank Svetlin Kolev for his help in making the video. Video created by Jasmine Abdulcadir. Used with permission. (Illustration at 00:37 modified from https://commons.wikimedia.org/wiki/File:Clitoris_anatomy_labeled-en.svg. Illustrations from 00:56 through 02:26 and 02:35 through 02:49 reprinted from World Health Organization (WHO). WHO guidelines on the management of health complications from female genital mutiliation. Geneva, Switzerland: World Health Organization; 2016. Photo of neuroma of the clitoris at 03:07 is reproduced from Abdulcadir J, Pusztaszeri M, Vilarino R, Dubuisson JB, Vlastos AT. Clitoral neuroma after female genital mutilation/cutting: a rare but possible event. J Sex Med. 2012 Apr;9(4):1220–5. Copyright 2012, with permission from Elsevier.)

subtypes of female genital mutilation according to WHO's classification (Figs. 1–5 and Video 1 [Video 1 is available online at http://links.lww.com/AOG/A867]). It also illustrates some examples of common long-term complications (Fig. 6 and Video 1 [Video 1, http://links.lww.com/AOG/A867]).

We envision that the visual reference can be used as a standalone guide for patient management and can be consulted by caregivers when unsure on the type of female genital mutilation diagnosed. The guide and accompanying text can facilitate training of health care providers globally in accurate diagnosis for both clinical management, patient–provider communication, and accurate recording and reporting to governments where required. This reference tool also could be integrated into surveys for monitoring the prevalence of female genital mutilation types and subtypes.

Scan this image to view Video 1 on your smartphone.

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