Treatment of hydatidiform mole using manual vacuum aspiration: technical and tactical aspects

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Hydatidiform mole (HM) represents the benign spectrum of gestational trophoblastic disease (GTD), an abnormal pregnancy characterized by aberrant fertilization of the oocyte.¹ The treatment of HM is uterine evacuation, usually done through electric vacuum aspiration (EVA). However, numerous conditions—including legal, religious, and economic—prevent several countries from having access to the devices used to perform EVA. In Brazil the vast majority of GTD Reference Centers do not have EVA, so more than 70% of HMs are treated with manual vacuum aspiration (MVA).² The aim of this video article is to present a representative case where MVA is used for evacuation of HM (Video 1).

After approval by the Rio de Janeiro Federal University Institutional Review Board in February 2021 (number: 4.555.188) and obtaining written informed consent from the patient, we describe a case of a patient at 12 weeks gestation who was referred to our institution due to bleeding, uterus larger than gestational age, human chorionic gonadotropin of 178 678 IU/L, and ultrasonography suggesting HM. She underwent uterine MVA for the treatment of a molar pregnancy.

In the video we show the MVA technique for the treatment of HM, as well as strategies to make the surgery safer and more effective (see also online supplemental tables 1 and 2). There are two important tips for performing molar MVA: the first is to have two aspiration syringes, which makes the procedure more efficient, and the second is to perform cervical dilation with the plastic cannulas themselves, minimizing the risk of perforation.³ Ultrasonography guidance during the procedure assists in monitoring uterine evacuation, avoiding uterine perforation, and helping to ensure complete evacuation. When the contents of the syringe become pink and bullous, it is a sign that the uterine cavity is empty.⁴ A gentle uterine sharp curettage after molar evacuation is important to remove any adherent trophoblastic tissue remnants.

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Video 1 Uterine evacuation by manual vacuum aspiration guided by ultrasonography for the treatment of hydatidiform mole. This video shows that manual vacuum aspiration can replace electric vacuum aspiration in settings that do not have electrical equipment for molar evacuation. This simple, effective, and inexpensive method can be a safe alternative for uterine evacuation in cases of hydatidiform mole.

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Video article

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REFERENCES

- 1 Elias KM, Berkowitz RS, Horowitz NS. State-Of-The-Art workup and initial management of newly diagnosed molar pregnancy and postmolar gestational trophoblastic neoplasia. *J Natl Compr Canc Netw* 2019;17:1396–401.
- 2 Braga A, Moraes V, Maestá I, *et al.* Changing trends in the clinical presentation and management of complete hydatidiform mole among Brazilian women. *Int J Gynecol Cancer* 2016;26:984–90.
- 3 Padrón L, Rezende Filho J, Amim Junior J, *et al.* Manual compared with electric vacuum aspiration for treatment of molar pregnancy. *Obstet Gynecol* 2018;131:652–9.
- 4 Braga A, Padrón L, Balen JL. Video hysteroscopy in the diagnosis of molar pregnancy in two challenging situations: complete mole with normal hCG and partial mole with early gestational age. *J Minim Invasive Gynecol* 2021;S1553-4650:00081–9.