The Papaya Workshop: A Simulation to Teach Intrauterine Gynecologic Procedures

Included Resources

• Facilitator Guide
• Learner Handout
• Appendix with photographs of the equipment set-up and papaya procedures

Supplemental Learning

The Papaya Workshop Training Video\textsuperscript{1} is an optional, supplemental resource which is available at www.papayaworkshop.org. On this site, you’ll find videos demonstrating a papaya workshop, teaching resources, and information on the uses and benefits of the workshop.

How to use these materials

The facilitator guide can be followed step-by-step to lead a group of learners through the papaya workshop. The learner handout is a supplement to allow learners to follow along; it can be distributed at the start of the session. The visual aids in the appendix and optional training video are intended to familiarize a trainer with the workshop prior to facilitating a group.

Conceptual Background

The papaya workshop is a fun, inexpensive, and easily replicable model to teach gynecologic, intrauterine procedures to students or clinicians. The papaya is an excellent uterine model because it is the shape and size of a uterus, has a stem end that resembles a cervix, and has an interior texture similar to endometrium. The workshop can be used to teach anatomy, bimanual examination, IUD placement, and uterine aspiration, as well as relevant clinical points associated with these skills.

\textsuperscript{1} Papaya Workshop Video by Bixby Center for Global Reproductive Health/Ryan Residency Training Program is licensed under a Creative Commons Attribution-NonCommercial 3.0 Unported License.
**Successful use of the workshop**

This workshop has been taught in clinical and pre-clinical settings by faculty at UCSF and elsewhere, to medical students, advanced-practice clinicians, and physicians, in many countries including Vietnam and South Africa. Hundreds of clinicians have been trained to do and to teach the workshop.

In 2005, an evaluation of the workshop was carried out among 3rd year medical students at UCSF for whom the papaya workshop is a routine part of their curriculum.\(^2\) We surveyed students before and after the workshop, and again at the end of the month-long rotation to measure any changes in their knowledge and comfort with IUD insertion and uterine aspiration. An overwhelming majority of students (90%) highly valued the workshop. Statistically significant increases were observed in knowledge, in confidence with counseling patients about intrauterine procedures, and in comfort performing the procedures (that persisted to the end of the clerkship rotation). This workshop has remained a routine component of the 3rd year students’ curriculum since 2003, so that at UCSF alone more than 1,000 students have completed the workshop.

**Practical Implementation Advice**

The papaya workshop can be carried out in a one-hour session with one trained facilitator. The session can be extended to 90 minutes to allow for more in-depth discussion of anatomy and practice of the techniques. The workshop can be taught to groups as large as 30 learners, but if the group is larger than 10, consider recruiting an assistant to help to ensure that learners receive individual instruction.

**Equipment List:**

One of each of the following items is needed per papaya. Two to four people can share a papaya. As the equipment does not need to be sterile, everything, excluding the papayas, can be washed and reused.

- Hawaiian or strawberry papaya
- Mirena IUD
- Copper IUD
- Dilator set (up to 25/27)

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\(^2\) Steinauer J, Preskill F, Robertson P. Using Papayas to Train Medical Students in Intrauterine Procedures. MEDICAL EDUCATION 2007; 41: 1083–1111
• Endometrial biopsy pipelle
• Syringe with needle
• Ipas syringe
• Cannula (half 8mm, half 9mm)
• Ipas adapter
• Uterus model
• Curette (any size)
• Single-tooth tenaculum
• Uterine sound (can be shared between multiple stations)
• Supplies for clean-up (disposable tablecloths to cover the tables, paper towels, trash bags)

This equipment list reflects the workshop as detailed in the attached materials—it can be adjusted to reflect the educational objectives of any given session. In addition to the equipment above, the workshop requires a space that will accommodate the group with tables and chairs.

Objectives

The objectives of this workshop can vary based on the level of experience of the audience and the clinical points the facilitator chooses to emphasize based on the clinical environment. The basic objectives outlined in the version of the workshop attached here are the following.

At the end of the workshop the learner will be able to:

1. Model a perfect bimanual examination.
2. List the risks of instrumenting a uterus.
3. Do a paracervical block, endometrial biopsy, and IUD insertion (on a papaya).
4. List the contraindications to IUDs for contraception.
5. Aspirate and curette a papaya.

Limitations and Ideas for Expansion

The main limitation of the papaya workshop is that the papaya is not a perfectly realistic model of a uterus. The fruit model, while sharing many characteristics of a
uterus, does not mimic some anatomical features such as the tone of the cervical os or the attachments to the uterus. This may limit teaching of anatomy and cervical dilation, for example. Compared to high-tech simulations, the papaya workshop is inexpensive and supplies are easily obtainable. There is an initial purchasing cost for the equipment, which may be limiting in low-resource settings, but since the equipment does not need to be sterile, it can be washed and used again and again. Additionally, old or expired equipment, such as endometrial pipelles, cannulas, or sounds, which would otherwise be thrown away, can be used rather than purchasing new equipment. As another alternative, equipment can be borrowed from a local clinic. In this case the cost of purchasing new equipment is substituted by staff time used to rewash and properly sterilize borrowed equipment. Papayas themselves are relatively inexpensive; however it may be difficult to find papayas in many places, especially in parts of the world where they do not grow. In such circumstances, melons and dragon fruits have been substituted for papayas. The workshop can be adapted to use other fruit models, as needed. This workshop can be adapted to many different skill levels, and for many gynecologic procedure settings.