

**Essure® Permanent Birth Control System** (Conceptus Incorporated, San Carlos, Calif) is a minimally invasive, nonincisional alternative for women seeking sterilization. **Essure** micro-insert placement procedure can be performed in an outpatient or office surgery setting. Using a transcervical approach, an **Essure** micro-insert is placed in the proximal portion of each fallopian tube where it expands and anchors itself. The **Essure** micro-insert induces a local, benign fibrous tissue ingrowth from the surrounding tubal walls.<sup>1</sup> This tissue ingrowth completely occludes the fallopian tube within 3 months, resulting in sterilization. The effectiveness and safety of the **Essure Permanent Birth Control System** was demonstrated in clinical trials in 632 women who relied on **Essure** for contraception for 12 or more months.<sup>2,3</sup> The following is a case study from one of those clinical trials.

## Case Study 1

**Presentation:** A 33-year-old Caucasian female presents requesting sterilization, but states that she wants to avoid surgery.

**Medical History:** The gynecology history is unremarkable and a history of regular menses exists. This woman has had 2 children, and both births were live and vaginal. Her previous method of contraception was condoms. Currently, she is employed outside the home.

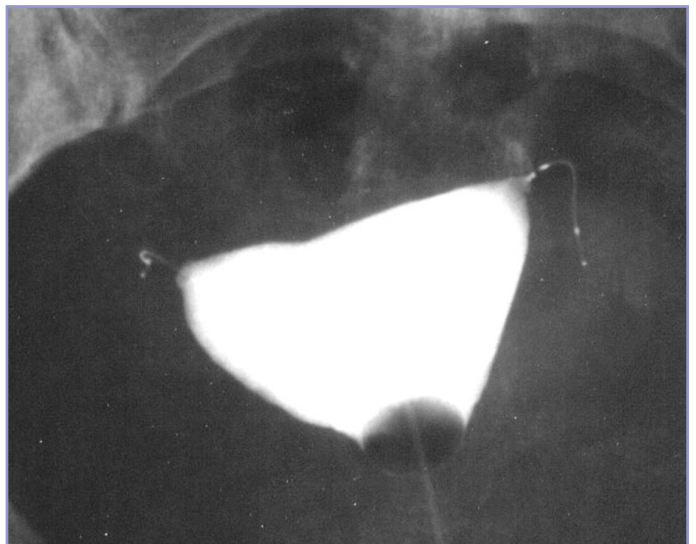
**Physical Examination:** Test results for *Neisseria gonorrhoea* and *Chlamydia trachomatis* are negative; urine pregnancy test is negative; hemoglobin and WBC count are within normal ranges. Weight is 64 kg; position of uterus is anteflexed; cycle day is 11.

**Preprocedure:** Prior to the **Essure** micro-insert placement, 775 mg of naproxen sodium and 5.0 mg of diazepam were given by mouth. A paracervical block was placed using 16 mL bupivacaine injected at 12, 3, and 9 o'clock positions. To optimize patient comfort, fentanyl 50 µg IV, midazolam 1.0 mg IV, and paracetamol 2.0 g were administered.



1-year x-ray

**Procedure:** With the individual in the lithotomy position, pump-feed saline (warmed to 37°C) irrigation was used to gently dilate the cervix and provide forward vision for the hysteroscope. Under hysteroscopic visualization (Olympus 5.5 mm), an **Essure** micro-insert was inserted first into the proximal portion of the right and then the proximal portion of the left fallopian tube. After placement, 6-mm and 5-mm trails were observed on the right and left tube, respectively. No adverse events and no pain accompanied the procedure. Insertion of the **Essure** micro-inserts was accomplished in 7 minutes.



3-month hysterosalpingogram

**Postplacement:** Recovery was uneventful; no medications were needed; satisfactory placement of the micro-inserts was confirmed by pelvic x-ray; discharge occurred 68 minutes after the procedure.

**Follow-up:** On day 1, normal activities were resumed. At 3 months, total occlusion was shown by hysterosalpingogram and patient was permitted to rely on **Essure** for contraception. At 18 months, **Essure** micro-inserts continued as the method of contraception. When asked to rate average device wearing comfort as excellent, very good, good, fair, or poor, response was "excellent."

**NOTE:** This is a single-case study and may not represent typical results.

This case was performed by Enrique Cayuela Font, MD, and Federico Heredia, MD, Spain.

## References

1. Valle RF, Carignan CS, Wright TC. Tissue response to the STOP microcoil transcervical permanent contraceptive device: results from a pre hysterectomy study. *Fertil Steril.* 2001;76:974-980.
2. Kerin JF, Carignan CS, Cher D. The safety and effectiveness of a new hysteroscopic method for permanent birth control: results of the first Essure pbc clinical study. *Aust N Z J Obstet Gynaecol.* 2001;41:364-370.
3. Valle RF, Cooper JM, Kerin JF. Hysteroscopic tubal sterilization with the Essure nonincisional Permanent Contraception System. *Obstet Gynecol.* 2002;99(suppl):11S.