

Essure Problems

The Essure Problems Group appreciates your attention to the severe women's health hazard we are presenting to you. We are a group of almost 23,000 women primarily in the United States harmed by a medical device known as Essure. This is a permanent female sterilization device manufactured and marketed by Bayer Health. It is now clear that many women across United States have been seriously harmed by this device.

Essure is a nickel based metal coil that causes blockage of the fallopian tubes, thereby preventing pregnancy. It was approved through an expedited premarket approval (PMA) process at FDA's Center for Devices and Radiological Health in 2002. It is a fact highlighted during the FDA hearing on Essure, held on September 24, 2015, that the FDA and Bayer had not considered or studied the potential severe allergic and hypersensitivity reactions to nickel. Also, 30% of the clinical trial participants were "lost to follow up". Furthermore, evidence was provided of data tampering, suggesting the possibility of fraud at the time of PMA approval. A recent controlled study of the device on the *British Medical Journal* website found that women who were implanted with the device were 10 times more likely to need reoperations within the first year after the procedure. Another team of researchers at Yale University estimated that as many as 9.6 percent of women could become pregnant within 10 years of undergoing hysteroscopic sterilization, or Essure. That is nearly four times the estimated risk after a laparoscopic tubal ligation, the more traditional method.

The Essure device enjoys substantial federal funding for family planning purposes. Therefore, given the unacceptable and incomplete safety testing, and potential fraud, we believe the United States Congress has a responsibility to intervene and investigate.

Essure's inappropriate PMA status must be revoked immediately. Essure's PMA approval has rendered the device entirely exempt from civil litigation based on the Supreme Court ruling. This "exemption" has caused a terrible violation of our civil rights as women. Thousands of American women are claiming harm by Bayer's Essure, but no court will hear our cases because of this device's PMA status. We wish to remind you that we are American women in the year 2015 and such a standard of injustice is fully unacceptable and uncivilized. We are respectfully demanding you restore our civil rights by voting yes to Congressman Fitzpatrick's E-Free Act.

www.essureproblems.webs.com

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(Original Signature of Member)

114TH CONGRESS
1ST SESSION

H. R. _____

To direct the Commissioner of Food and Drugs to issue an order withdrawing approval for Essure System.

IN THE HOUSE OF REPRESENTATIVES

Mr. FITZPATRICK introduced the following bill; which was referred to the Committee on _____

A BILL

To direct the Commissioner of Food and Drugs to issue an order withdrawing approval for Essure System.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “E-Free Act”.

5 **SEC. 2. WITHDRAWAL OF PREMARKET APPROVAL FOR**
6 **ESSURE SYSTEM.**

7 Not later than 60 days after the date of enactment
8 of this Act, the Commissioner of Food and Drugs shall
9 issue an order under section 515(e) of the Federal Food,

- 1 Drug, and Cosmetic Act (21 U.S.C. 360e(e)) withdrawing
- 2 approval for Essure System.



Perspective

Revisiting Essure — Toward Safe and Effective Sterilization

Sanket S. Dhruva, M.D., Joseph S. Ross, M.D., M.H.S., and Aileen M. Gariepy, M.D., M.P.H.

Permanent sterilization is the second-most-common contraceptive approach used by women in the United States, undergone by about 345,000 women per year. For many decades, laparoscopic surgery

was the standard of care. In 2002, a novel hysteroscopic sterilization device was made available after expedited review and premarketing approval by the Food and Drug Administration (FDA): the Essure System (Bayer). With Essure, a coil designed to induce fibrosis and tubal occlusion is placed into each fallopian tube to prevent fertilization. Three months after placement of the coil, women undergo hysterosalpingography to confirm device placement and occlusion before discontinuing use of other contraceptive methods. The device offers clear advantages: no incisions, abdominal entry, or general anesthesia, and it can be

implanted in office-based settings. The manufacturer estimates that 750,000 women have received Essure.

On September 24, 2015, nearly 13 years after Essure's approval, the FDA is reconvening its Obstetrics and Gynecology Devices Panel to evaluate its safety and effectiveness and to assess the need for additional postmarketing studies.¹ Safety concerns were raised by women with Essure implants who have reported large numbers of adverse events to the FDA through its Manufacturer and User Facility Device Experience (MAUDE) database, including incomplete procedures, tubal perforations, intrac-

table pain and bleeding leading to hysterectomies, possible device-related deaths, and hundreds of unintended pregnancies. We believe that these safety concerns, along with problems with the device's effectiveness, might have been detected sooner or avoided altogether if there had been higher-quality premarketing and postmarketing evaluations and more timely and transparent dissemination of study results.

The premarketing approval of Essure in 2002 was based on two nonrandomized, nonblinded, prospective studies that lacked a comparator group and enrolled a total of 926 women. The FDA review concluded that 97% of women with bilateral Essure placement could rely on the device. This determination of reliability, however, was not based on an intention-to-treat analysis and

considered only women who successfully underwent the procedure and had 3-month hysterosalpingograms showing correct Essure placement and bilateral tubal occlusion (data presented to the FDA described a 14% failure rate for the first attempt at bilateral coil placement). Because of these exclusions, the declared reliability rate was based on only 664 (89%) of the 745 women who underwent an implantation attempt and did not account for 181 enrolled women who subsequently chose not to undergo the procedure (for unstated reasons), did not pass screening tests, or were excluded for not meeting other criteria. Among the 745 women who underwent an attempted Essure procedure, only 632 (85%) were followed up at 1 year for effectiveness outcomes and 682 (92%) for safety outcomes. Just 197 (25%) were followed for effectiveness at 2 years, which further limited the evaluation of adverse events and device safety.

Although Essure is designed to remain in place for a woman's lifetime, few women in the premarketing studies were followed for more than 1 year — a limitation that precludes conclusions about longer-term risks. Appropriately, FDA approval was conditional on two mandatory postapproval studies to provide 5-year follow-up data on patients in the premarketing approval studies. However, these studies were not made well known: neither one was registered at ClinicalTrials.gov (though that probably wasn't legally required under the FDA Modernization Act) and their results were not disseminated in a timely way. One postapproval study remains unpublished, and the other was published only re-

cently² — 13 years after device approval and 7 years after study completion and reporting to the FDA.

The recently published study reports no pregnancies during 5 years, suggesting that the device is 100% effective.³ There are, however, concerns about incomplete follow-up and biased results reminiscent of those in the premarketing studies. Five-year follow-up was completed in only 71% of women who underwent implantation (366 of 518). Women who did not have successful bilateral Essure placement, became pregnant before the 3-month hysterosalpingogram, or underwent subsequent hysterectomy were excluded from the effectiveness analysis. Although the FDA's postapproval website states that “one of the strengths of the studies is the observed follow-up rates,” the 71% rate suggests that adverse events, including unintended pregnancies, were probably missed and would affect interpretation of study findings.

In addition, the FDA required, as a condition of approval, a third study examining day-of-procedure outcomes achieved when 40 physicians, newly trained in Essure implantation, attempted the procedure in 20 patients each. Although this study was not registered and the only publication was based on a subgroup of the study cohort, FDA reports indicate that the trial was stopped early after enrolling 514 women. Despite successful bilateral placement in only 458 (89%), 38 device malfunctions, and 13 periprocedural adverse events — and no reported postimplantation follow-up — the device was deemed safe in women who had successful bilateral device placement.³

Since the FDA approval of Es-

sure, the manufacturer has made several modifications to improve device function and to enhance bilateral placement rates. A new Essure model was approved by the FDA in late 2007 through a premarketing approval supplement. As a condition of this approval, a new postmarketing study involving 800 patients was required. This study was never registered at ClinicalTrials.gov, despite the 2007 FDA Amendments Act requirement, and was stopped early at the manufacturer's request after 578 patients underwent attempted implantation. Its findings are minimally informative, since no follow-up data were collected and nearly all study results reported on the FDA website are redacted.

Given the limitations of the relevant studies, it's not surprising that so many years passed before safety issues with Essure were recognized. To identify adverse events occurring in day-to-day practice, the FDA examines reports voluntarily submitted to its MAUDE database. Although passive adverse-event reporting is known to underestimate adverse-event rates, as of June 2015, a total of 5093 adverse-event reports related to Essure had been made to MAUDE, most of which listed multiple safety concerns. These reports led the FDA to update the device label in 2013 to include information about risks of chronic pain and device migration and to reconvene its Obstetrics and Gynecology Devices Panel to reassess safety and effectiveness.

Though Essure offers possible advantages to women seeking sterilization, the evidence suggests that it is neither as effective nor as safe as the premarketing-approval evaluation indicated. An intention-to-treat analysis using

a Markov model and incorporating all relevant available data, including data from the manufacturer and elsewhere, suggests that there's a 5.7% annual risk of pregnancy after hysteroscopic sterilization,⁴ and in 2012 the instructions for use of Essure were updated to acknowledge the occurrence of hundreds of unintended pregnancies.

The upcoming meeting of the Obstetrics and Gynecology Devices Panel represents a clear opportunity to impose requirements that will more fully elucidate the safety and effectiveness of Essure. A new study focused on patient-centered end points — unintended pregnancy, device migration, tubal perforation, bleeding, pain, and events such as hysterectomy and death — in all enrolled women is needed to provide clear estimates of device performance. Such a study should compare outcomes in women receiving Essure with those in women undergoing laparoscopic sterilization, the standard of care, and should be overseen by an impartial, off-site data and safety monitoring board performing periodic, planned reviews with follow-up for at least 5 years.

The problems of inadequately rigorous premarketing and postmarketing studies, unregistered clinical trials, and incomplete and delayed dissemination of results are not unique to Essure. Most FDA-required postapproval studies are smaller than the premarketing studies, most follow patients for 1 year or less, and nearly half lack comparator groups.⁵ The 13-year history of Essure emphasizes the necessity for thorough examination and timely reporting of patient outcomes in well-conducted premarketing clinical trials and dedicated follow-up in postmarketing studies. Only then will we better understand the risks and benefits of various devices. In the case of Essure, these data would allow women to make more informed decisions regarding hysteroscopic sterilization.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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Safety and efficacy of hysteroscopic sterilization compared with laparoscopic sterilization: an observational cohort study

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ABSTRACT

OBJECTIVE

To compare the safety and efficacy of hysteroscopic sterilization with the “Essure” device with laparoscopic sterilization in a large, all-inclusive, state cohort.

DESIGN

Population based cohort study.

SETTINGS

Outpatient interventional setting in New York State.

PARTICIPANTS

Women undergoing interval sterilization procedure, including hysteroscopic sterilization with Essure device and laparoscopic surgery, between 2005 and 2013.

MAIN OUTCOMES MEASURES

Safety events within 30 days of procedures; unintended pregnancies and reoperations within one year of procedures. Mixed model accounting for hospital clustering was used to compare 30 day and 1 year outcomes, adjusting for patient characteristics and other confounders. Time to reoperation was evaluated using frailty model for time to event analysis.

RESULTS

We identified 8048 patients undergoing hysteroscopic sterilization and 44 278 undergoing laparoscopic sterilization between 2005 and 2013 in New York State. There was a significant increase in the use of hysteroscopic procedures during this period, while use of laparoscopic sterilization decreased. Patients undergoing hysteroscopic sterilization were older than those undergoing laparoscopic sterilization and were more likely to have a history of pelvic inflammatory disease (10.3% v 7.2%, $P<0.01$), major abdominal surgery (9.4% v 7.9%, $P<0.01$), and cesarean section (23.2% v 15.4%, $P<0.01$). At one year after surgery, hysteroscopic sterilization was not associated with a

higher risk of unintended pregnancy (odds ratio 0.84 (95% CI 0.63 to 1.12)) but was associated with a substantially increased risk of reoperation (odds ratio 10.16 (7.47 to 13.81)) compared with laparoscopic sterilization.

CONCLUSIONS

Patients undergoing hysteroscopic sterilization have a similar risk of unintended pregnancy but a more than 10-fold higher risk of undergoing reoperation compared with patients undergoing laparoscopic sterilization. Benefits and risks of both procedures should be discussed with patients for informed decisions making.

Introduction

Female sterilization is one of the most commonly used methods of contraception worldwide and is adopted by over 10 million women of reproductive age in the United States.¹ Bilateral tubal ligation via laparoscopic approach or mini-laparotomy has been the primary technique for decades; and implant based sterilization by means of a hysteroscopic approach was developed as a less invasive alternative. The “Essure” device received approval in Europe (Conformité Européenne (CE) mark) in 2001 and was approved by the US Food and Drug Administration (FDA) in 2002.² It is used in North America, Europe, Australia, New Zealand, Central and South America, and the Middle East.³

The hysteroscopic procedure with Essure device does not require general anesthesia, and its safety has been considered to be similar or superior to that of laparoscopic sterilization.⁴ However, the hysteroscopic approach was reported to be associated with a higher risk of unintended pregnancy and has a three month post-procedure waiting period before sterilization becomes effective.⁴ Unintended pregnancies can be considered as a failure of the procedure and can lead to a higher risk of potentially lethal ectopic pregnancies.⁵ Other reported complications related to device include pelvic pain, hemorrhage, and device migration or incompatibility⁶ that can lead to reoperation. Since the Essure device’s approval, thousands of reports of adverse events related to the device have been received by the FDA, and device failure became a subject of litigation in 2014.⁶⁻⁸

The only prospective data regarding safety and efficacy of hysteroscopic sterilization was reported by phase II and phase III studies sponsored by the manufacturer.⁹⁻¹¹ No randomized controlled trial or large comparative cohort study has been conducted to compare the efficacy and safety of the implant based hysteroscopic procedure with the traditional laparoscopic procedure. The purpose of our study was to evaluate the performance, safety, and other outcomes of hysteroscopic sterilization compared with laparoscopic

WHAT IS ALREADY KNOWN ON THIS TOPIC

Laparoscopic bilateral tubal ligation has been the primary method of female permanent birth control for decades, and hysteroscopic microinsert device was developed as a less invasive alternative method

Since the procedure’s approval, there has been thousands of reports of adverse events related to the use of hysteroscopic sterilization, but there is little information regarding its safety and efficacy compared with tubal ligation

WHAT THIS STUDY ADDS

This population based cohort study found that patients who underwent hysteroscopic sterilization did not have a higher risk of unintended pregnancy than those who underwent laparoscopic tubal ligation

However hysteroscopic sterilization was associated with over 10-fold higher risk of reoperation, and the higher risk of reoperation persisted in various age groups and patients with history of pelvic inflammatory disease

