PROJECT INFORMATION

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Comparing Essure[®] and Tubal Ligation to Prevent Pregnancy

Principal investigator

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Organization

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What was the research about?

Each year, more than 345,000 women in the United States have procedures to permanently prevent pregnancy. These procedures have risks such as pain or bleeding. Also, some women need to have a repeat procedure.

In this study, the research team compared two procedures to prevent pregnancy for women who haven't had a baby within six weeks:

- **Tubal ligation**, often called getting your tubes tied. In this procedure, doctors burn, block, or remove the fallopian tubes. Tubal ligation is the most common permanent way to prevent pregnancy among US women.
- **Hysteroscopic sterilization with a device called Essure.** In this procedure, a doctor places a metal coil in each fallopian tube. The coils cause scars, which block the tubes. Essure was offered from 2002 until 2018. Some people still rely on Essure to prevent pregnancy.

The research team compared how well the procedures worked to prevent pregnancy; they also looked at side effects.

What were the results?

Pregnancy rates after both procedures were higher than expected. Doctors expect less than 1 percent of women to get pregnant after these procedures.

After five years, compared with women who had tubal ligation, women who had Essure:

- Had lower pregnancy rates. About 6 percent of women who had Essure had a pregnancy compared with 7 percent who had tubal ligation.
- Were more likely to have a repeat procedure to prevent pregnancy.

After one year, compared with women who had tubal ligation, women who had Essure were:

- More likely to have abnormal bleeding in the uterus
- Less likely to have pelvic or stomach pain
- Less likely to have surgeries to remove the uterus or ovaries

The two groups didn't differ in whether women had:

- Headaches, backaches, or pelvic inflammatory disease after one or five years
- Pelvic pain, stomach pain, or other procedures after five years

Who was in the study?

The study included data from 29,871 women ages 18–50 in California who had procedures to prevent pregnancy between 2008 and 2014. All women had Medicaid. Of the women, 23,965 women had tubal ligation, and 5,906 women had Essure. Data were available for 10,352 of these women after five years.

Among the women, 51 percent were Hispanic, 30 percent were White, 8 percent were Black, 3 percent were Asian, and 7 percent reported other race. The average age was 33.

What did the research team do?

The research team reviewed insurance data for the women to see if they had a pregnancy or pregnancy-related claims after having Essure or tubal ligation.

Doctors and patients, including women who had Essure or tubal ligation, gave input on the study. They also asked the research team to explore results for women who had used intrauterine devices, or IUDs, to prevent pregnancy.

What were the limits of the study?

The study included women with Medicaid in California. Results may differ for other women.

Future research could look at procedures to prevent pregnancy that are done within six weeks after childbirth.

How can people use the results?

Although Essure is no longer offered, doctors and patients with Essure can use the results when making decisions about preventing pregnancy.

To learn more about this project, visit www.pcori.org/Gariepy386.