Opportunistic Salpingectomy: Benefits Do Not Outweigh Risks

To the Editor: The article in the Spring issue by Beckett Gremmels et al., "Opportunistic Salpingectomy to Reduce the Risk of Ovarian Cancer," states that performing the procedure in low-risk women is moral.[1] There are several problems with this.

First, the benefit of preventing cancer is small. As stated in the article, the average lifetime risk for a woman to get ovarian cancer by age seventy is 1:70. Five-year survival is 46 percent. Using the authors' statement that salpingectomy reduces the risk by 42 percent, we calculate that 165 women would need to undergo the procedure to prevent one instance of cancer—361 women to prevent one cancer death. And this is only a possible benefit, based on observational studies. The American College of Obstetricians and Gynecologists, which is not known for its pro-life stance, states that "randomized controlled trials are needed."[2] In the article, the authors use incidental appendectomy as a comparable example, but the lifetime risk of appendicitis in women is 6 percent, and thirty-six appendectomies are required to prevent one case of appendicitis. Certainly, appendectomy is potentially much more beneficial than salpingectomy and does not result in sterility. In their attempt to differentiate between salpingectomy and tubal ligation, the authors fail to mention that tubal ligation can also reduce the risk of ovarian cancer, though only by 34 percent.[3]

Second, the long-term effects of salpingectomy are unknown. The longest studies have only looked at ovarian function for three months following the procedure.[4] A study showing that women are more likely to die from premenopausal oophorectomy (because of an increased risk of heart disease) took twenty-four years to perform.[5] The authors state that it is up to a woman to decide whether to undergo a risk-reducing salpingectomy, but how can she make an informed decision when there is no information?

Third, a salpingectomy done on a women in her twenties or thirties, usually at the same time as a cesarian section, is being performed decades before there is any significant risk of the disease. The risk starts to rise dramatically in a woman's midforties: the average age at diagnosis is sixty-three, and the average age at death is seventy. Also, between 2004 and 2013, the risk of getting ovarian cancer dropped 1.9 percent per year while the survival rate rose 2.2 percent per year.[6]

Fourth, this type of preventive surgery plays into cancer fears in this country. For example, compared to men in Sweden, American men who have prostate cancer with a low risk of spreading are much more likely to opt for treatment than for watchful waiting.[7] Studies have shown a marked increase in anxiety among patients just at the thought that they might have cancer.[8]

Fifth, the authors minimize the risk of regret a woman might have after being sterilized. In women age thirty and younger, that risk is as high as 20 percent. In women over age thirty, it drops to 6 percent.[9] However, with salpingectomy, unlike tubal ligation, reversal is not even a possibility. The authors acknowledge that subsequent pregnancies could only be achieved by illicit means, such as IVF, or questionable ones, such as intrauterine insemination and low tubal ovum transfer—though how one

could perform low tubal transfer in a woman without fallopian tubes was left unaddressed.

Sixth, the authors state that opportunistic salpingectomy is licit only for a woman at average risk, when performed with another abdominal procedure, such as a cesarian section, and when the intent is to reduce the risk of ovarian cancer; the unintended side effect is sterility. Yet they agree that "if the intent not to have more children is held as a *necessary* moral condition … that condition (intention) is achieved, in addition to being means by which reduction of the risk of death from ovarian cancer is achieved. All that is required from the Catholic moral perspective is that the woman understand that permanent … side effect of the procedure, and that the procedure's benefits are proportionate to this side effect" (124, original emphasis). Since only women who have decided to be closed to their gift of fertility will consider this procedure, that immediate intent of sterilization is an essential part of the decision and therefore negates the minimal good of the procedure.

Seventh, the authors minimize the great good of the gift of fertility over the great good of the gift of life. Certainly, when a woman is in imminent danger, as with uterine cancers, cancers where chemotherapy could reduce fertility, or ectopic pregnancies, it is licit to do what is necessary to save the life of the mother even if it means, as an unintended consequence, that she may no longer be able to have children.[10] But Gremmels et al. consider the unlikely 1:70 possibility of getting cancer and the 1:250 chance of dying from that cancer by age seventy more important than the immediate and real gift of children.

Finally, because they marginalize the gift of fertility, the authors ignore other less mutilating ways of preventing ovarian cancer, such as having several children, breast-feeding those children, eating a healthy diet, and exercising regularly. In fact, having three or more children and breast-feeding those children for over ten months reduces the risk of ovarian cancer by more than 90 percent, which is far greater than the risk reduction due to salpingectomy. Breast-feeding just one child for thirteen months is more effective than opportunistic salpingectomy, reducing the risk of ovarian cancer by two-thirds.[11]

Reasons one through five and eight negate the proportionality of their argument, while reasons six and seven negate the principle of double effect.

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1. Beckett Gremmels et al., "Opportunistic Salpingectomy to Reduce the Risk of Ovarian Cancer," *National Catholic Bioethics Quarterly* 16.1 (Spring 2016): 99–131.

2. American College of Obstetricians and Gynecologists, Committee on Gynecologic Practice, "Salpingectomy for Ovarian Cancer Prevention," Committee Opinion Number 620, *Obstetrics and Gynecology* 125.1 (January 2015): 279–281.

3. David Cibula et al., "Tubal Ligation and the Risk of Ovarian Cancer: Review and Meta-analysis," *Human Reproductive Update* 17.1 (January–February 2011): 56.

4. Austin D. Findley et al., "Short-Term Effects of Salpingectomy during Laparoscopic Hysterectomy on Ovarian Reserve: A Randomized Control Pilot," *Fertility and Sterility* 100.6 (December 2013): 1704.

5. William H. Parker et al., "Ovarian Conservation at the Time of Hysterectomy and Long-term Health Outcomes in the Nurses' Health Study," *Obstetrics and Gynecology* 113.5 (May 2009): 1027–1037. See also Lynn T. Shuster et al., "Prophylactic Oophorectomy in Premenopausal Women and Long-Term Health: A Review," *Menopause International* 14.3 (September 2008): 111–116; and William H. Parker, "Bilateral Oophorectomy versus Ovarian Conservation: Effect on Long-term Women's Health," *Journal of Minimally Invasive Gynecology* 17.2 (March–April 2010): 161–165.

6. National Cancer Institute, "Ovary Cancer," SEER Stat Fact Sheet, accessed August 29, 2016, http://seer.cancer.gov/statfacts/.

7. Matthew R. Cooperberg et al., "Trends in Management for Patients with Localized Prostate Cancer, 1990–2013," *JAMA* 314.1 (July 7, 2015): 80–82; and Stacy Loeb et al., "Population-Based Study of Use and Determinants of Active Surveillance and Watchful Waiting for Low and Intermediate Low Risk Prostate Cancer," *Journal of Urology* 190.5 (November 2013): 1742–1749.

8. Rhiannon C. Macefield et al., "Impact of Prostate Cancer Testing: An Evaluation of the Emotional Consequences of a Negative Biopsy Result," *British Journal of Cancer* 102.9

(April 27, 2010): 1335–1340; and Margaret M. Byrne et al., "Anxiety, Fear of Cancer, and Perceived Risk Following Lung Cancer Screening," *Medical Decision Making* 28.6 (November–December 2008): 917–825.

9. Susan D. Hillis et al., "Poststerilization Regret: Findings from the United States Collaborative Review of Sterilization," *American Journal of Obstetrics and Gynecology* 93.6 (June 1999): 889–895.

10. Though, according to Gremmels et al., "the idea of 'treating a pathology' and what it means for a pathology to be 'current' or 'imminent' have also changed" (117).

11. Dada Su et al., "Ovarian Cancer Risk Is Reduced by Prolonged Lactation: A Case-Control Study in Southern China," *American Journal of Clinical Nutrition* 97.2 (January 2, 2013): 354–359.

Salpingectomy and the Risk of Ovarian Cancer

To the Editor: This letter is in response to the article about opportunistic salpingectomy in the Spring 2016 issue of the *NCBQ*, which justifies the new practice of removing a woman's fallopian tubes at the time of another surgery in order to reduce the 1.4 percent general population risk of ovarian cancer in women.[1]

The word *opportunistic* means "[to exploit] opportunities with little regard to principle or consequences."[2] The authors conclude that the intended good—of lowering the risk of ovarian cancer, a disease of older postmenopausal women, by removing a young woman's normal fallopian tubes—outweighs the loss of her fertility. They admit there are no randomized controlled trials to show that this is a valid approach to reducing the incidence of ovarian cancer.

The American College of Obstetricians and Gynecologists supports these recommendations under the following circumstances:

> The surgeon and patient should discuss the potential benefits of the removal of the fallopian tubes *during a hysterectomy* in women at population risk of ovarian cancer who are not having an oophorectomy.
>
> When counseling women about *laparoscopic sterilization methods*, clinicians can communicate that *bilateral salpingectomy* can be considered a method that provides *effective contraception*.
>
> Prophylactic salpingectomy may offer clinicians the opportunity to prevent ovarian cancer in their patients.
>
> Randomized controlled clinical trials are needed to support the validity of this approach to reducing the incidence of ovarian cancer.[3]

The committee opinion clearly talks about removing the fallopian tubes in association with a hysterectomy or a sterilization procedure: "Salpingectomy at the time of hysterectomy or as a means of tubal sterilization appears to be safe, without an increase of complications, such as the need for blood transfusions and readmissions, compared with hysterectomy alone or tubal ligation."[4]

Ovarian cancer is a disease of older women, many of whom present in their late fifties or early sixties; half of cases occur in women sixty-three years of age or older.[5] Prophylactic surgery is usually carried out if the risk of acquiring a disease is 10 percent or greater. Even in women who carry an increased risk of ovarian cancer—those with Lynch syndrome and those who carry BRCA2 gene mutations—surgery can be carried out at age forty-five or later. Women who carry the BRCA1 gene mutation, who thus have a 20 to 40 percent risk of ovarian cancer as well as an 85 percent risk of breast cancer, can have their tubes and ovaries removed at age forty or ten years before the earliest onset of cancer in their families.

There is no moral dilemma when bilateral salpingectomy is done at the time of a hysterectomy, because removal of the diseased uterus results in unintended sterilization anyway.

What is not stated but is implied by the authors is that it is justifiable and ethical to perform a bilateral salpingectomy on a young women at the time of her second, third, or fourth cesarean section, at the time of a laparoscopy for pelvic pain, or at the time of surgery for another benign female gynecologic issue. They state all the bioethical principles for justifying this, claiming their intention is to lower the woman's already

small risk of ovarian cancer, not to sterilize the woman. The authors state, "We set clear limits regarding when opportunistic salpingectomy could be chosen, namely, in concurrence with another procedure that will occur anyway for another medical reason" (125). In other words, taking a woman to the operating room for a tubal ligation after delivery cannot be justified in a Catholic hospital, but as long as you are in her abdomen for another reason, it is legitimate? The authors cannot claim that a bilateral salpingectomy, a physical mutilation, in a young woman at the time of a cesarean section is morally good or morally neutral when the outcome is the termination of her childbearing capacity as much as twenty years before she develops a small risk of developing ovarian cancer.

In the years after *Humanae vitae*, every possible reason for putting a woman on oral contraceptives for "medical reasons" was justified by Catholic doctors when the real intention was to provide contraception. In the same way, this moral reasoning paves the way for widespread sterilizations in Catholic hospitals with the stated intention of preventing 0.7 percent of women from developing ovarian cancer. This shows a total lack of respect for a woman's gift of fertility.

As an analogous procedure, the authors mention the prophylactic removal of a healthy appendix in a young person to prevent appendicitis. The appendix, however, has no known function, whereas the fallopian tubes are vital to childbearing. In addition, post-tubal ligation syndrome, may occur after female sterilization; it includes heavy periods, decreased libido, pelvic pain, premenstrual syndrome, and regret for the sterilization. Women who have had a tubal ligation are also at increased risk for hysterectomy.[6]

Ovarian cancer is diagnosed in 22,280 women each year in the United States and causes 14,240 deaths per year. Risk factors to women include early menarche (before age twelve), no childbirths, first child born after age thirty, infertility, and menopause after age fifty.[7] Obesity is associated with an 80 percent higher risk in women fifty to seventy-one years of age who did not take hormonal replacement. Ovarian cancer causes more deaths than any other cancer of the female reproductive system but accounts for only 3 percent of all cancers in women. The five-year survival rate is 45 percent.

Pancreatic cancer, which affects both men and women, has a general population risk of 1.4 percent, a similar incidence to ovarian cancer. It is the fourth leading cause of death from cancer and the eleventh most common cancer in the United States. As with ovarian cancer, the symptoms are usually vague and the cancer is diagnosed at an advanced stage. Twenty-eight to more than thirty thousand new cases are diagnosed each year in the United States, and twenty-four thousand people die from it each year in this country. Although the five-year survival rate has improved slightly in recent years, nearly all patients with pancreatic cancer die of it, and most die within one year of diagnosis. Risk factors include smoking and tobacco use, obesity, diabetes, chronic pancreatitis, and hereditary syndromes.[8]

Using the arguments put forth in the article, would it not be reasonable to remove the pancreas prophylactically to prevent the development of this deadly cancer? Of course not, because the pancreas serves the very important purpose of providing digestive enzymes and insulin to regulate blood sugar. Well, the fallopian tubes have a very important purpose also.

Breast cancer is the most common cancer among women in the United States: 12 percent of American women will develop it, and 246,660 new cases of invasive breast cancer are diagnosed each year. More than forty thousand women in the United States are expected to die annually from it. Gremmels et al. quote a high survival rate from breast cancer (90 percent), but while the five-year survival rate from stage II breast cancer is 92 percent, the rate is 72 percent from stage III breast cancer and 22 percent from stage IV. Although breast cancer is linked to mutations of the BRCA1 and BRCA2 genes, 85 percent of cases occur in women with no family history of the disease. Each year, ten times more women develop invasive breast cancer than ovarian cancer, and although the five-year survival

is better for invasive breast cancer than for ovarian cancer, the expense and morbidity associated with breast cancer treatment are significant.

Yet the authors do not advocate bilateral mastectomies on all women, because "there are benefits to keeping … the breasts besides reproduction and breast-feeding, but the only benefit to keeping the fallopian tubes is the ability to conceive naturally" (127). Really? What benefits? The female breasts are not necessary for reproduction or even for the nutrition of an infant, but they are part of a woman's sexual appeal to a man. The authors imply that it is fine to take away a woman's ability to have a child to reduce the risk of an uncommon cancer but it is not fine to take away her sex appeal to reduce the risk of a common one.

The authors recognize that this new recommendation could serve as a loophole for performing sterilizations in Catholic hospitals and could be a source of scandal. They propose that this could be alleviated by providing the cancer-reducing explanation for these actions. They say that "those who continue to be scandalized even after a proper explanation do so of their own accord and need not stand in the way of otherwise justifiable actions" (129). They also state that "facilities, ethicists and ethics committees, when lacking evidence to the contrary, must presume the good will and right intent of physicians and patients requesting these procedures, as well as for any procedure in general" (129). Does this mean that the ethics committee of a hospital or the local Ordinary should not interfere with direct abortion, infanticide, deprivation of food and hydration, or euthanasia when it is done in a Catholic hospital with the "right" intention?

These arguments appear to be those of moral relativism, a serious problem in this culture and in medicine. Moral relativism "is the position that moral or ethical propositions do not reflect objective and/or universal moral truths, but instead make claims relative to social, cultural, historical or personal circumstances. It does not deny outright the truth-value or justification of moral statements … but affirms relative forms of them. It may be described by the common aphorism 'When in Rome, do as the Romans do.'"[9] According to Peter Kreeft, "moral relativism has a reputation for being compassionate, caring and humane, but it is an extremely useful philosophy for tyrants."[10]

It is wrong to remove a young woman's healthy fallopian tubes. The article appears to justify the procedure to reduce a woman's risk of developing ovarian cancer from 1:75 to 1:150—a reduction that will take decades to prove. But it also provides a way for Catholic doctors and Catholic hospitals to rationalize performing sterilizations at the time of cesarean sections and other gynecological surgeries.

There is no moral objection to removing a woman's fallopian tubes at the time of a hysterectomy or when she is beyond childbearing, in the menopause or past age fifty, but the removal is not justified in a healthy young woman of childbearing age. Learning one of the modern methods of natural family planning will help a young woman space her family, while having children early in her marriage and maintaining an ideal body weight will reduce her risk of ovarian and other cancers.

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1. Beckett Gremmels et al., "Opportunistic Salpingectomy to Reduce the Risk of Ovarian Cancer," *National Catholic Bioethics Quarterly* 16.1 (Spring 2016): 99–131.

2. *Merriam-Webster.com*, s.v. "opportunistic," accessed August 25, 2016, http://www.merriam-webster.com/.

3. American College of Obstetricians and Gynecologists, Committee on Gynecologic Practice, "Salpingectomy for Ovarian Cancer Prevention," Committee Opinion Number 620, *Obstetrics and Gynecology* 125.1 (January 2015): 279, emphases added.

4. Ibid., 280.

5. Edward R. Cost, Kevin L. Hall, and Brian Szender, "Prevention of Ovarian Cancer," *ACOG*

Update 41.1 (July 1, 2015), http://www.acogupdate.com/.

6. Susan D. Hillis et al., "Higher Hysterectomy Risk for Sterilized than Nonsterilized Women: Findings from the U.S. Collaborative Review of Sterilization, from the U.S. Collaborative Review of Sterilization Working Group," *Obstetrics and Gynecology* 91.2 (February 1998): 241–246.

7. Ovarian Cancer National Alliance, "Risk Factors," accessed August 25, 2016, http://www.ovariancancer.org/.

8. Centers for Disease Control and Prevention, "Pancreatic Cancer and the Environment," updated June 6, 2014, http://ephtracking.cdc.gov/showPancreaticCancer.action.

9. Luke Mastin, "Moral Relativism," *Basics of Philosophy*, 2008, http://www.philosophybasics.com/.

10. Peter Kreeft, quoted in Mark Sullivan, "The Case for Absolutism," *Boston College Chronicle* 8.12 (March 2, 2000), http://www.bc.edu/bc_org/rvp/pubaf/chronicle/v8/mr2/kreeft.html.