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# Ethical Duties in Ectopic Pregnancy

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#### **Abstract**

Ectopic pregnancy is occurring at an increasing frequency in the United States due to a rise in sexually transmitted disease, fertility treatments such as in vitro fertilization, smoking, stress, and drug use. An ectopic pregnancy (EP), from Latin roots meaning "out of place," is a pregnancy that does not correctly implant into its normal location in the endometrium of the uterus. Instead, the developing embryo implants in the fallopian tube, the cervix, the ovaries, or the abdominal or pelvic cavity. EPs today constitute about 2% of all pregnancies, of which 97% implant in the fallopian tube. A ruptured EP can be deadly, leading to 6% of all maternal deaths from massive hemorrhage.

#### Keywords

Ectopic Pregnancy, ethics

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# **Ethical Duties in Ectopic Pregnancy**

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#### Introduction

Ectopic pregnancy is occurring at an increasing frequency in the United States due to a rise in sexually transmitted disease, fertility treatments such as *in vitro* fertilization, smoking, stress, and drug use. An ectopic pregnancy (EP), from Latin roots meaning "out of place," is a pregnancy that does not correctly implant into its normal location in the endometrium of the uterus. Instead, the developing embryo implants in the fallopian tube, the cervix, the ovaries, or the abdominal or pelvic cavity. EPs today constitute about 2% of all pregnancies, of which 97% implant in the fallopian tube. A ruptured EP can be deadly, leading to 6% of all maternal deaths from massive hemorrhage.

## **Diagnosing and Treating Ectopic Pregnancies**

Ectopic pregnancies result from strictures or dysfunctional cilia in the fallopian tube, which prevent migration of the embryo down to the uterus. The embryo instead burrows into the side of the fallopian tube. The pregnancy usually develops until 8-10 weeks of gestation, where it may become symptomatic by forming a palpable mass, or by rupturing the nearby ovarian artery.

Diagnosis of an unruptured EP begins with a pelvic exam of a woman with a positive pregnancy test (elevated  $\beta$ -hCG in the urine). The physician may find on exam that there is no normal pregnancy within the uterus, but instead a mass on one side of the pelvis. An ultrasound can then confirm the diagnosis. At this point, there are several options for treatment (Anderson, 2011; Foster, 2010; Sullivan, 2013).

Among the various treatment options, non-intervention is no longer medically accepted by healthcare systems today because of the risk of ovarian artery rupture, with resultant massive pelvic bleeding. Expectant management may be possible, acknowledging the risk of rupture and hemorrhage, but awaiting the possible natural resolution of the EP. With close monitoring, this may be indicated when  $\beta$ -hCG levels are lower than normal, indicating that the tubal pregnancy may spontaneously abort (Catholics United for the Faith, 2004; Foster, 2010; Kaczor, 2001).

Other treatment options deal with the fallopian tube through salpingectomy and salpingostomy. Salpingectomy refers to the removal of the entire fallopian tube containing the EP. This resolves the issue of the growing embryo that could cause the tube to rupture, possibly killing the mother. Salpingostomy removes only the embryo by cutting open the fallopian tube, removing the embryo with forceps. Physicians can either suture the tube closed or allow the tube to simply heal and reclose naturally, avoiding buildup of scar tissue that could cause a subsequent EP (Kaczor, 2001).

Methotrexate is a pharmacological agent that treats EP by inhibiting embryo cellular reproduction. It is non-invasive and non-surgical because it deals with the EP by interfering with DNA synthesis. Kaczor also proposes the "milking" technique, which squeezes the pregnancy

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toward the infundibulum in order to avoid tubal rupture and hemorrhaging (Kaczor, 2001; DeCherney, 2008).

# **Ethical Duties in Ectopic Pregnancy**

Each of these treatments entails specific ethical duties that one must consider when confronted with an EP. In this paper, we will assume that personhood begins at conception. Non-intervention of EP may uphold sanctity of both lives by taking neither, but this is at the expense of a huge risk for the mother. This does not conform to the bioethical principle of non-maleficence, which is the duty for health professionals to avoid harm. For example, Kathleen Prieskorn, a mother with an ectopic pregnancy, was denied treatment at a Catholic hospital when the physician detected a fetal heartbeat, even though she was bleeding internally. She had travelled 80 miles to the nearest hospital, and had no insurance. The hospital would not treat Kathleen because of their understanding of the Ethical and Religious Directives for Catholic Health Care Services. This document prohibits abortions, including treatment for ectopic pregnancies. An interesting facet of this case is that the physician gave Kathleen \$400 in cash, making himself morally complicit with the "abortion" she would receive at another hospital in order to save her life (Ginty, 2011).

While non-intervention is clearly not an option for protecting a woman's life, salpingectomy removes the diseased organ, along with the ectopic pregnancy. Some physicians would ethically compare this to the removal of a cancerous organ. Because it is a pathology, the beneficent action would be to remove the pathology. This preserves the woman's life, but may diminish her fertility (Kaczor, 2001).

Salpingostomy, on the other hand, can preserve fertility by extracting only the unviable embryo, without removing the tube. The ethical duty to avoid direct killing of the embryo is not seen much of a problem because it has no chance of living. Of more concern is protection of the woman's life. Preservation of fertility is certainly of great value.

Methotrexate also fulfills the duty to protect the woman's life, keeping her from harm by stopping DNA synthesis in the embryo until it dies. In contrast, the "milking" technique may protect both the woman's life and the embryo's life. The duty to avoid direct killing is of great importance in Catholic moral philosophy, which is why conservative ethicists seriously consider this technique (Kaczor, 2001).

### **Ethical Conflicts in Treating Ectopic Pregnancy**

Expectant management seems ethically similar to non-intervention. Though it acknowledges the risks of tubal rupture and internal hemorrhaging leading to death, it does not seem beneficent to just allow an abnormality to continue, with its attendant high risks, when various other interventions are available.

Seeing the fallopian tube as a pathology allows for the principle of double effect. This principle states that an action providing serious harm (killing the embryo) is permissible as an unintended consequence if it brings about a good result (saving the woman's life). However, there is nothing pathological about the tube itself; it is the embryo inside that causes the problem. On the basis of the principle of double effect, Catholic hospitals may use salpingectomy because it allows the death of the embryo to be seen as an unintended consequence of treatment (Kaczor, 2001).



By contrast, a good reason to prefer the use of salpingostomy is that salpingectomy both "loses the developing human life and diminishes the reproductive capacity of the woman" (Kaczor, 2001). At least with salpingostomy (or perhaps methotrexate), the woman can salvage her reproductive abilities. In some ways, this may actually be more ethical because it promotes procreation in the future.

On the other hand, does salpingostomy entail a direct or intentional abortion? It is certainly acceptable if the embryo is dead. Pacholczyk viscerally describes slicing the fallopian tube and "scooping" out the living embryo, only to see it die quickly after (2009). Salpingostomy may be from a desire to for a good end, but by an arguably evil means: the killing of the embryo by removing it with forceps. Perhaps the intent to save the woman's fertility constrains the intent to save the mother, making fertility the central goal. Yet we cannot say that through salpingostomy there is no intent *not* to kill the embryo (Kaczor, 2001; Pacholczyk, 2009).

Perhaps advances in microsurgery could someday make embryo "transfer" possible, moving it to another safe place (e.g., elsewhere in the uterus). This might make salpingostomy more ethically attractive to Catholics. At the very least, if something can be ethical in some situations, it cannot also be intrinsically evil (Anderson, 2011).

While salpingostomy might be ethically acceptable, methotrexate introduces other concerns. Some may consider this to be a pharmacological attack on the embryo. Does the proximity of the embryo's death justify such an attack? The ethical question hinges on whether methotrexate is actually killing if it halts the "destructive trophoblast by stopping further protein synthesis" (Kaczor, 2001). Methotrexate targets the placenta-like cells that attach to the fallopian tube, but may not actually target the embryo, according to some. Therefore, death of the embryo is an unintended consequence that is foreseen but not desired. If the cells are part of the embryo, this could be considered killing. The placenta-like cells indeed are part of the embryo because the mother does not produce them. Perhaps the non-invasive, non-surgical benefits are not worth the ethical implications of killing nor the health side effects. Methotrexate often induces nausea, vomiting, sleeplessness, dizziness, mouth sores, abdominal pain, mood alteration, anemia (requiring blood transfusions), lung and liver damage, and more (Kaczor, 2001; Pacholczyk, 2009).

## **Extending the Issue**

The ethical conflicts presented by ectopic pregnancy show how vital it is to have a solid deontological approach. EP treatment magnifies the challenges when looking at heterotopic pregnancies. Heterotopic pregnancies are the simultaneous existence of intrauterine and ectopic pregnancies. If one desires to preserve the gestating child, surgery through salpingostomy or salpingectomy is required. This is stronger evidence that methotrexate would not be ethical since there is yet another life at stake. Methotrexate would eliminate the ectopic pregnancy while simultaneously halting the successful intrauterine pregnancy, most likely killing that child. The ethical duties here are to protect the life of the implanted embryo and the mother, while preserving fertility. Does the ectopic embryo have a lesser sanctity of life? To dismiss it would certainly defy the conception view of personhood. Some could say that to perform a salpingostomy or salpingectomy would be the height of pragmatism, by allowing the weak to suffer and die for the greater good. The successful pregnancy and the mother perhaps have more to offer to society because the ectopic embryo will most likely die. I personally wonder how



Catholic ethicists would respond to this, knowing how tightly they hold to their anti-abortion principles.

# My Personal Vantage Point

I believe that salpingostomy is an ethically permissible option for treating ectopic pregnancies. Physicians who perform this procedure should act with humble and respectful professionalism, recognizing the sanctity of each embryo and the lost life. Ectopic pregnancies tend to be more common in countries with more STDs such as gonorrhea, chlamydia, and AIDs. In Sub-Saharan Africa, the culture is so sensitive to the sanctity of life that medical professionals gasp in mournful awe at the sight of the ectopic child. After the surgery is complete they will allow the mother to hold the ectopic child, allowing her to truly mourn the loss of the life. The care and mindfulness with which these people invest into having a small funeral service proves that salpingostomy can be done rightly (Sullivan, 2013).

My next thought is this: is fertility something we need to sacrifice because of our sin? We do not deserve anything; any blessing we receive comes directly from God's grace. However, I do not believe that we should accept the punishment of possible infertility that salpingectomy demands. EPs are not preventable, at least not currently. It is true that God is sovereign and altogether just. An ectopic pregnancy could very well be an act of justice from God for immoral sexual activity. As Paul says, "What then shall we say? Is God unjust? Not at all! For he says to Moses, 'I will have mercy on whom I have mercy, and I will have compassion on whom I have compassion (Rom. 9:14-15, NIV). We do not understand the mind of God (2 Cor. 2:16, NIV) and we know He is sovereign above all.

Considering expectant management, some physicians estimate that 40-60% of EPs resolve spontaneously. Therefore, women with EPs may be encouraged to watchfully wait before undergoing immediate treatment (Anderson, 2011). Even though it could eliminate the ethical dilemma of having to destroy the embryo, this seems dangerous, because it amplifies the risk of tubal rupture. We could choose to trust in God's sovereignty that the child will spontaneously abort as we wait in hope. However, is this considered evil because we are hoping the baby will die by spontaneous abortion? To me, this seems to make no theological or moral sense.

Even if the ectopic embryo is dead and has no cardiac activity, I do not believe that all treatments are the same. That sanctity of life is a higher good than preserving fertility. If one cannot salvage the embryo, saving the mother's life is the most important goal, followed by preserving fertility. Because salpingostomy allows for future procreation and can be performed with the knowledge that life is precious, I believe it to be the most reasonable treatment for ectopic pregnancy.

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