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Coping with Ectopic Pregnancies

William E. May

Emeritus Michael J. McGivney Professor of Moral Theology, Pontifical John Paul II Institute for Studies on Marriage and Family at The Catholic University of America and Senior Research Fellow, Culture of Life Foundation

This article takes up the following: definition of ectopic pregnancy; frequency and causes; medical ways of coping with ectopic pregnancies; current debates among U.S. Catholic theologians/philosophers/bioethicists regarding morality of those ways; moral analysis of them.

Definition

An ectopic ("out of place," from the Greek *ek*, out of, and *topos*, place) pregnancy occurs when a developing new human person does not implant in the uterus, where it belongs, but elsewhere in the mother's body, usually in the fallopian tube or, more rarely, in the ovary, the cornua, the abdomen, or the cervix. Ectopic pregnancy presents a major health problem for women of childbearing age. It is the result of a flaw in human reproductive physiology that allows the conceptus to implant and mature outside the endometrial cavity. Without timely diagnosis and treatment, ectopic pregnancy can become a life-threatening situation[1].

Ectopic pregnancy currently is the leading cause of pregnancy-related death during the first trimester in the United States, accounting for 9% of all pregnancy-related deaths. In addition to the immediate morbidity caused by ectopic pregnancy, the woman's future ability to reproduce may be adversely affected as well[2].

Frequency and causes[3]

Since 1970, the frequency of ectopic pregnancy has increased 6-fold, and it now occurs in 2% of all pregnancies. An estimated 108,800 ectopic pregnancies in 1992 resulted in 58,200 hospitalizations with an estimated cost of $1.1 billion.

Many factors contribute to the relative risk of ectopic pregnancy. Theoretically, anything that hampers the migration of the embryo to the endometrial cavity could predispose women to ectopic gestation. But the most common cause is antecedent infection caused by Chlamydia trachomatis which causes pelvic inflammatory disease (PID), a sexually transmitted disease. The incidence of tubal damage increases after successive episodes of PID (i. e., 13% after 1 episode, 35% after 2 episodes, 75% after 3 episodes). Another cause is a prior ectopic pregnancy. After one ectopic pregnancy, a patient incurs a 7- to 13-fold increase in the likelihood of another ectopic pregnancy. Overall, a patient with prior ectopic pregnancy has a 50-80% chance of having a subsequent intrauterine gestation, and a 10-25% chance of a future tubal pregnancy.

Amazingly, another major cause of ectopic pregnancy is *conception after tubal ligation*. This has been demonstrated to increase the risk of developing ectopic pregnancy. Thirty-five to 50% of patients who conceive after a tubal ligation are reported to experience an ectopic pregnancy. Ectopic pregnancies following tubal sterilizations usually occur 2 or more years after sterilization, rather than immediately after. In the first year, only about 6% of sterilization failures result in ectopic pregnancy. But ectopic pregnancies after tubal ligation are particularly dangerous to the lives of the women because at first a

tubal pregnancy is not suspected because of the tubal ligation.

Another major cause of ectopic pregnancy is the use "assisted reproductive technologies" and the use of fertility drugs—these are commonly employed by those technologies. The risk of ectopic pregnancy and heterotopic pregnancy (ie, pregnancies occurring simultaneously in different body sites) dramatically increases when a patient has used assisted reproductive techniques to conceive, such as in vitro fertilization (IVF) or gamete intrafallopian transfer (GIFT)… Studies have demonstrated that up to 1% of pregnancies achieved through IVF or GIFT can result in a heterotopic gestation, compared to an incidence of 1 in 30,000 pregnancies for spontaneous conceptions».

Using IUD's (Intrauterine devices) to prevent conception can also cause an ectopic pregnancy. «The presence of an inert copper-containing or progesterone intrauterine device (IUD) traditionally has been thought to be a risk factor for ectopic pregnancy. However, only the progesterone IUD has a rate of ectopic pregnancy higher than that for women not using any form of contraception. The modern copper IUD does not increase the risk of ectopic pregnancy. Nevertheless, if a woman ultimately conceives with an IUD in place, it is more likely to be an ectopic pregnancy. The actual incidence of ectopic pregnancies with IUD use is 3-4%».

Medically Available Ways of Coping with Ectopic Pregnancies

Medical authorities in 1992 recognized four ways of managing ectopic pregnancies[4]: 1) "expectant" therapy; 2) drug therapy; 3) conservative surgical treatment; and 4) radical surgical treatment. 1) "Expectant" therapy simply means that nothing is done and one simply waits for the tubal pregnancy to resolve itself by spontaneous abortion or miscarriage. This may occur in as many as 64 percent of the cases. 2) Drug therapy involves the uses of methotrexate (MTX). MTX interferes with the synthesis of DNA and resolves tubal pregnancies by attacking the trophoblast, i.e., the outer layer of cells produced by the developing baby, connecting it to its mother. According to the scientific literature, actively proliferating trophoblastic tissue «is exquisitely sensitive to this effect [interference with the synthesis of DNA], which forms the rationale for its use in the treatment of ectopic pregnancies»[5]. Under 3), "conservative surgical treatment," are included a) partial salpingectomy or removal of the portion of the fallopian tube *affected* by the tubal pregnancy, i.e., that portion of the tube containing the tubal pregnancy, with subsequent resectioning of the fallopian tube and b) salpingostomy, procedures in which an incision is made in the affected part of the fallopian tube and the developing embryo is extracted, along with portions of the fallopian tube itself, by the use of forceps or other instruments. 4) "Radical surgical treatment" is necessary if the fallopian tube has ruptured and consists in a total salpingectomy or the removal of the entire affected fallopian tube and, with it, the unborn child.

Current debates among U. S. theologians/philosophers/bioethicists loyal to Magisterial teaching regarding ways of coping with ectopic pregnancies

We can begin by looking at the change in the teaching on this matter by the Bishops of the United States in their *Ethical and Religious Directives for Catholic Health Care Services*. This document was formerly called *Ethical and Religious Directives for Catholic Health Care Facilities*[6]. The first edition of this work issued by U. S. Bishops was promulgated in 1971, a second edition in 1973, a third somewhat later and a fourth, substantively revised entitled *Ethical and Religious Directives for Catholic Health Care Services* was issued in 1994, and a fifth edition, with only minor changes from the fourth, was promulgated in 2009.

The Ethical and Religious Directives

In the 1971 set of *Ethical and Religious Directives for Catholic Health Care Facilities*, the bishops of the United States included the following directive, n. 16: «In extrauterine pregnancy the affected part of the mother (e.g., cervix, ovary, or fallopian tube) may be removed, even though fetal death is foreseen, provided that (a) the affected part is presumed already to be so damaged and dangerously affected as to warrant its removal, and that (b) the operation is not just a separation of the embryo or fetus from its site within the part (which would be a direct abortion from a uterine appendage) and that (c) the operation cannot be postponed without notably increasing the danger to the mother».

This directive clearly authorizes as morally licit the use of partial salpingectomy (excision of part of the fallopian tube) or total salpingectomy (excision of the entire tube) in order to safeguard the mother's life when there is grave danger of hemorrhaging from the fallopian-tube pregnancy. But it also *excludes* use of a salpingostomy (i.e., slitting the affected tube, removing the unborn child from it, and then sewing it up so that it would be still be available). At the time this directive was written, the management of tubal pregnancies by methotrexate was not known.

But the relevant directive in the 4th (1994) and 5th (2011) editions of *Ethical and Religious Directives for Catholic Health Care Services* is markedly different. It says simply: «In case of extrauterine pregnancy, no intervention is morally licit which constitutes a direct abortion» (n. 48). Moreover, in directive n. 47 the bishops declared in these editions: «Operations, treatments and medications that have as their direct purpose the cure of a proportionately serious pathological condition of a pregnant woman (i.e., a salpingectomy) are permitted when they cannot be safely postponed until the unborn child is viable, even if they will result in the death of the unborn child». The principal question now raised by theologians/philosophers/bioethicists and other loyal to the Magisterium is this: «What constitutes a "direct abortion" in the management of tubal pregnancies?».

In answering this question, we need to take very seriously the teaching of Blessed John Paul II in *Evangelium Vitae,* n. 58, where he defined abortion as: «the direct and deliberate *killing* (emphasis added), by whatever means it is carried out, of a human being in the initial phase of his or her existence, extending from conception to birth» (the Latin text reads: «abortus procuratus *quacumque peragitur via, deliberata est ac directa hominis occisio primordiali eius vitae tempore quod inter conceptionem decurrit et parturitionem*» (emphasis in original). Note that Blessed John Paul defines deliberate and direct abortion as the *killing* of an unborn human being. As theologians such as Angel Rodriguez Luño have noted, this definition differs from that found in standard moral theological treatises, deliberate, direct abortion was defined as the *removal of a non-viable embryo from its site within the mother's body,* and he referred to the widely used texts of D. M. Pruemmer, O.P. and H. Noldin, S. J. to illustrate this[7].

Because of this new definition of abortion as killing and not as *removal of a non-viable embryo/fetus from its site within the body of the mother,* we can now distinguish between deliberate and direct abortion as *killing* and deliberate and direct abortion as *removal*. The first is always gravely immoral; the second can be morally licit under specific conditions. It is conceivable that some "removals" of "expulsions" of a non-viable embryo/fetus do not have as their morally specifying object (i.e., the directly intended specifying object of the act—cf. *Veritatis Splendor,* n. 78, either as end or as means) the death of the unborn. For instance, if a pregnant woman has cancer of the uterus, the moral theology of Pruemmer et al. justified radiation therapy or even hysterectomy to protect the mother's life if these procedures could not be postponed until after viability outside the womb by the principle of double effect, even though the death of the non-viable

embryo/fetus was foreseen as an unintended effect of the radiation therapy or hysterectomy. But assume that the non-viable embryo/fetus could be removed from its mother's cancerous womb and transferred to an artificial womb (or perhaps to the womb of an unmarried twin sister?), would not its "removal" in such a case be far better than "allowing" it to die?

I raise this issue because it seems to me relevant in assessing the morality of salpingostomy and use of methotrexate in coping with ectopic pregnancies. I will not consider salpingectomy, either partial or total insofar as it has long been accepted, since the time of Bouscaren by both bishops and thinkers loyal to the Magisterium as morally permissible. I will first consider salpingostomy and then the use of methotrexate, and finally I will consider "expectant" therapy.

We need to take very seriously the teaching of Blessed John Paul II in Evangelium Vitae, n. 58, regarding abortion

With others[8] loyal to Magisterial teaching I think that salpingostomy can be justified as the "removal" of a non-viable embryo/fetus from its site within its mother's body and not as a *killing of an innocent human being.* The death of the non-viable embryo/fetus is neither the end nor chosen means to protecting its mother's life but is the unintended but foreseen consequence of an act morally specified as morally good.

In the 2nd (2008) edition of my *Catholic Bioethics and the Gift of Human Life,* impressed by an argument that Christopher Kazor (whose splendid *Ethics of Abortion*, a magnificent defense of the unborn, was published in 2010) had sent to me, I accepted the use of methotrexate, and still do so, using the same kind of reasoning employed in justifying salpingostomy. But I think that Martin Rhonheimer raises a good question regarding premature use of methotrexate in his 2009 work *Vital Conflicts in Medical Ethics,* although I think that arguments he used from a "virtue ethics" perspective in resolving "vital conflicts" are not good. He persuasively argued that methotrexate, the most common way to manage ectopic pregnancies, «is applied as it were "prophylactically" (i.e., preventatively), when it has not yet been established whether the embryo has any real chance at survival or whether it will die spontaneously»[9]. Nonetheless, Rhonheimer agrees that if the embryo does survive and its presence in the fallopian tube endangers the other's lfe—a "vital conflict" situation—then use of methotrexate is morally justified.

Although today the majority view of the medical profession is that "expectant therapy" is not consistent with standard of care and is safe in only the rarest of circumstances, it surely ought to be the way to proceed, if a competent pro-life gynecologist (and there are many) judges that this is the situation. If it involves an ectopic in the abdomen or ovary not yet hemorrhaging, then expectant therapy is advised because the baby may grow to term.

Conclusion

In this essay I have attempted to show the development of both Catholic Magisterial teaching and the positions of theologians/philosophers/bioethicists, doctors, and other health care personnel on the way to cope with ectopic pregnancies. Many committed Catholics disagree with me and others who accept as morally legitimate the methods I have sought to defend. Many still reject salpingostomy and methotrexate even in "vital conflict" cases[10]. I hope, however, that this brief essay will encourage further discussion.

NOTE

[1] For this see http://emedicine.medscape.com/article/258768-overview. Accessed 19 September 2011.
[2] See http://emedicine.medscape.com/article/258768-overview.
[3] *Ibid*. I have summarized/paraphrased this source, but I have cited some texts verbatim and placed them within quotation marks.
[4] J. D. Rock, «Ectopic Pregnancies», in *TeLinde's Operative Gynecology*, J. B. Lippencott, Philadelphia 1992, 412-414. But things have since changed. The on-line source, "UptoDate", is an online database that continually reviews the medical literature and then provides updated information, its website is: http://www.google.com/search?client=gmail&rls=gm&q=uptodate. According to a subdivision of this website, it appears that medical management with methotrexate is the preferred option for almost all ectopic pregnancies (http://www.uptodate.com/contents/methotrexate-treatment-of-tubal-and-interstitial-ectopic-pregnancy). According to "Update" "expectant therapy" is not consistent with standard of care and is safe in only the rarest of circumstances. I will examine this later. If surgery is undertaken, removal of the pregnancy with the ovarian tube versus removal of the embryo alone appears to be not so clear-cut and depends on different factors, but both are options.
[5] See J. Cannon and H. Jesionowska, «Methotrexate Treatment of Ectopic Pregnancy», *Fertility and Sterility*, 55 (June 1991), 1034.
[6] A helpful article on the history of the development of ethical directives for Catholic hospitals and health care providers is that of K. O'Rourke, «A Summary of the Development of the Ethical and Religious Directives for Catholic Health Care Services», *Health Progress*, (Nov-Dec 2001), 18-21.
[7] A. Rodriguez Luño, «La valutazione teologico-morale dell'aborto», in E. Sgreccia and R. Lucas Lucas (edited by), *Commento Interdisciplinare alla "Evangelium Vitae"*, Libreria Editrice Vaticana, Vatican City 1997, 419. Luño referred to Pruemmer's *Manuale Theologiae Moralis*, (Friburgi Brisg./Romae: Herder, 1961), Vol. 2, n. 137 and to Noldin's *Summa Theologiae Moralis*, (Oeniponte-Lipsiae: P. Rauch, 1941), Vol. 2, n. 342.
[8] E. g., Germain Grisez. See his massive (and still valuable) work *Abortion: The Myths, the Realities, and the Arguments*, (New York: Corpus Books [a division of the World Publishing Company], 1970), 340-346. In that work, applying his interpretation of St. Thomas Aquinas's analysis of killing in self-defense and of the principle of double effect basic to that analysis, Grisez defended salpingostomy, which at that time was rejected by the Magisterium. At the conclusion of his analysis Grisez wrote as follows in a most important passage: «…my conclusions about abortion [in the salpingostomy situation] diverge from common theological teachings, and also diverge from the official teaching of the Catholic Church as it was laid down by the Holy Office in the nineteenth century. I am aware of the divergence, but would point out that my theory is consonant with the more important and more formally definite teaching that direct killing is always wrong. I reach conclusions that are not traditional by broadening the meaning of "unintended" in a revision of the principle of double effect, not by accepting the rightness of direct killing or the violability of unborn life because of any ulterior purpose or indication». He then continue «*Most important, I cannot as a philosopher limit my conclusions by theological principles. However, I can as a Catholic propose my philosophic conclusions as suggestions for consideration in the light of faith, while not proposing anything contrary to the Church's teaching as a practical norm of conduct for my fellow believers. Those who already believe that there exists on this earth a community whose leaders are appointed and continuously assisted by God to guide those who accept their authority safely through time to eternity would be foolish indeed to direct their lives by some frail fabrication of mere reason instead of by conforming to a guidance system designed and maintained by divine wisdom*» (345-346).
[9] M. Rhonheimer, *Vital Conflicts in Medical Ethics: A Virtue Approach to Craniotomies and Tubal Pregnancies*, edited by W. F. Murphy, The Catholic University of America Press, Washington, D.C. 2009, 116.
[10] Two good examples are: M. A. Anderson, R. L. Fastiggi, D. E. Hargrover, J. C. Howard, and C. W. Kischer, «Ectopic Pregnancy and Catholic Morality: A Response to Recent Arguments in Favor of Salpingostomy and Methotrexate», *National Catholic Bioethics Quarterly,* Vol. 11, 1 (Spring 2011), 65-82, and K. Bohring, «The Moral Dilemma of Management Proceedings for Ectopic Pregnancies», available at http://www.uffl.org/vol12/bowring12.pdf. The more recent Anderson et al. essay is exceptionally worthwhile insofar as it incorporates much that Bohring presented and provides more recent scientific studies. Anderson et al. explicitly criticize the work of Kazcor, on which I rely, and also of Rhonheimer, whose arguments in favor of salpingostomy and methotrexate I reject; see my critique of Rhonheimer, «Martin Rhonheimer and Some Disputed Issues in Medical Ethics: Masturbation, Condoms, Craniotomies, and Tubal Pregnancies», *The Linacre Quarterly*, 77.3 (August 2010), 329-352.