Managing Tubal Pregnancies: Part I

Ectopic Pregnancies

A persistent, vexatious, and increasingly serious problem is the management of ectopic pregnancies, especially the tubal variety. In an ectopic pregnancy, the embryo implants not in the uterus, as it should, but in a place incapable of effectively supporting its full development. Often these pregnancies occur in the fallopian tube before the embryo reaches the uterus.

Modern diagnostic techniques enable physicians to detect tubal pregnancy earlier than heretofore. It has been estimated that about 64% of tubal pregnancies resolve spontaneously, making it unnecessary to do anything (J. Rock, "Ectopic Pregnancy" in TeLinde's Operative Gynecology, 1992, p. 420). Often, however, the trophoblastic cells (those cells which lead to the formation of the placenta and the chorionic and amniotic membranes), by exercising their proper function of establishing nutritional contact with the maternal tissue, injure the lining of the tube. The developing embryo rapidly erodes through the lining and grows into the adjacent layers of the tube (extra luminal growth). Eventually, this causes hemorrhaging and rupture of the tube. Rapid embryonic growth in a site incapable of supporting it all but guarantees the death of the child and seriously jeopardizes the life of the mother, unless there is some intervention.

It would be morally ideal to transplant the ectopic embryo to the uterus. Two successful transplants have been reported (1917, 1990), but physicians do not consider this a realistic option at present. If the ectopic pregnancy does not spontaneously resolve itself, there are several available treatments: 1) salpingectomy—removing either the whole tube or just its damaged segment and reconnecting the remaining portions; 2) salpingostomy—making a slit in the tube through which the damaged tissue (including the embryo) is pressed out (leaving the tube substantially intact); or 3) administering methotrexate—a cytotoxic drug which prevents the trophoblastic cells from maintaining the attachment of the embryo to the fallopian tube.

Moral Principles

When evaluating these medical procedures, we must accept the relevant teaching of the Magisterium, especially the general teaching that all innocent human life is sacred and has an inherent dignity from the first moment of conception due to its creation in the Image of God, redemption by Christ, and call to eternal life with God. No one may knowingly and deliberately kill an innocent human being at any stage of development. This is an exceptionless moral norm. The use of technical medical terms, such as zygote, embryo, and fetus, should not mask the fact that we are always speaking of a child, a human person.

When both mother and child are in danger, it is in no way justifiable to kill one in order to save the other. One may not do evil in order to achieve a good end (see Rom. 3:8). Specific teaching regarding ectopic pregnancies is expressed in the Ethical and Religious Directives for Catholic Health Care Services (1995), Directive #48 states: "In case of extraterine pregnancy, no intervention is morally licit which constitutes a direct abortion." Abortion is defined as "the directly intended termination of pregnancy before viability or the directly intended destruction of a viable fetus" (ERD #45). Direct abortion is distinguished from indirect abortion:

Operations, treatments, and medications that have as their direct purpose the cure of a proportionately serious pathological condition of a pregnant woman 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. (ERD #47)

Are the proposed medical treatments to be understood as direct or indirect abortion?

Salpingectomy

In the past, tubal pregnancies often were diagnosed only after the tube had been seriously damaged by the developing child. Under these conditions, salpingectomy has been deemed morally acceptable. One may remove the whole tube or a segment thereof even if it is foreseen that the child will die as a consequence. This protects the child's health and life, without denying the equal right to life shared by the child. The moral object of the surgery is to remove damaged tissue, a "proportionately serious" (i.e., life-threatening) pathology, despite the foreseen but unintended consequences for the child. This causes an indirect abortion, analogous to the often-discussed case of the 'cancerous uterus.'

Salpingectomy may leave the woman infertile on the affected side even if the tube is only partially removed and resected. This undesirable side effect has encouraged development of less invasive treatments, such as salpingostomy and methotrexate therapy. These procedures present the possibility of resolving the pregnancy at a lower cost, with quicker recovery, and with a higher likelihood that the woman retains her fertility. Are these newer treatments morally equivalent to salpingectomy?

A Closer Look at Tubal Pregnancy

In a tubal pregnancy, the child attaches in an abnormal site and causes injury to the fallopian tube such that increasingly serious damage and actual rupture will take place within a few weeks. Can the embryo be considered effectively attached when in a short time its demise will take place? One could argue that from the outset implantation has not been successful because the child was doomed to death from the beginning by attaching in an abnormal site, a site where it could not—except for very rare cases—be brought to term. This abnormal site is progressively deteriorating as the wall of fallopian tube is being destroyed by the continued activity of the trophoblast. "Effective implantation" should mean not only that here and now the system is able to provide adequate nourishment and oxygenation but also that this will continue until the child is born alive. Although there is no guarantee that a uterine pregnancy will proceed to term free of unforeseen accidents or disease, it is reasonably expected to go to term, whereas in a tubal pregnancy there can be no such expectation.

Implantation in the fallopian tube is life-threatening not only for the child, but also for the mother. As the
child grows in a part of the mother which cannot support pregnancy, her fallopian tube suffers progressive damage which ultimately endangers her life. In this sense, implantation in the fallopian tube amounts to a pathological condition for the mother.

**Salpingostomy**

This article argues that salpingostomy at least is a morally acceptable treatment of this pathology in the mother, not a direct abortion. The attachment of the embryo at this location (where it cannot survive to term and where it will soon produce life-threatening difficulties for the mother) constitutes a sufficiently serious pathology which can be treated in anticipation of irreversible structural damage. Methotrexate involves more complicated medical facts and will have to be addressed in another article. Let me state clearly that this analysis of salpingostomy is proposed for theological consideration and welcomes clarification or correction from the Magisterium. Other theologians have come to a different conclusion (see William E. May, "The Management of Ectopic Pregnancies," in *The Fetal Tissue Issue*, Cataldo and Moraczewski, O.P., eds., The Pope John Center, 1994, p. 121-147).

According to surgeons who perform salpingostomies, careful inspection of the affected tube reveals an enlargement of the tube itself at the location of the ectopic pregnancy. This enlargement of the tube corresponds to the growth of the ectopic pregnancy and has been so identified by histological examination of tubal tissue obtained by salpingectomy. In other words, the implanted embryo is not merely sitting, as it were, on the surface of the inner lining of the tube, but is embedded in the tissue of the tube. This observation supports the claim that the embryo’s attachment to the tube constitutes a pathological condition. A pair of forceps or other suitable instrument is used to remove the pathological tissue in such manner that part of the tubal wall remains, although thinned out by the procedure. This maneuver extracts a sizable amount of damaged tubal tissue, but the tube is subsequently able to repair itself so that the woman’s fertility is not impaired by the surgery. Of course, and unfortunately, along with the removal of the pathological tissue—the tissue damaged by the ingrowing trophoblastic cells of the embryo—the embryo proper is also removed.

Although foreseen, one does not choose or select or will the death of the embryo either as an end in itself or as a means to a further good end, namely, the health and life of the mother, including protection of her ability to conceive another child. Salpingostomy is the removal of damaged tissue and detachment of the trophoblast (of the embryo) from the abnormal site. The specific focus of the surgical action is the removal of damaged tubal tissue and damaging trophoblastic tissue, not the destruction or death of the embryo, even though one foresees that by taking that action the embryo’s death will take place.

**Will this position be used to justify abortions?**

There is, of course, a valid concern here that a proposed solution to a difficult moral problem may, at the same time, be misused to justify procedures which are clearly evil, namely, direct abortions. Might this be the case here? I think not, for the following reasons:

1) The argument begins from the fact that the implantation of the child is clearly in an abnormal site. Uterine pregnancies are not so considered even if at times the embryo may not be located in the best site in the uterus for optimal development and delivery.
2) In a tubal pregnancy, serious damage is done to the tube which generally does not occur to the uterus in case of uterine pregnancies.
3) In tubal pregnancies there is no rightful expectation of an eventual live delivery whereas that is usually the case in uterine pregnancies.

**Conclusion**

From a moral point of view, the initial steps upon diagnosing a tubal pregnancy should be medically conservative, such as expectant therapy coupled with careful monitoring. If the tubal pregnancy continues and the medical judgment is that it will not resolve spontaneously then other treatment modalities—as medically indicated—may be used so long as they do not constitute a direct lethal attack on the embryo.

In light of the above moral analysis—if valid—a salpingostomy could be performed if there is a desire also to retain the reproductive potential of the patient. But it would be important in the use of any procedure that the patient and the physicians not intend the death of the embryo/child even if such is clearly foreseen. The object of the moral act is the termination of a process causing serious injury to the mother because of the abnormal site in which the child cannot be effectively supported, ultimately leading to the death of the child.

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