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CONTROVERSIES ON THE BEGINNING OF HUMAN LIFE – SCIENCE AND RELIGIONS CLOSER AND CLOSER

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SUMMARY

One of the most controversial topics in modern bioethics, science, and philosophy is the beginning of individual human life. In the seemingly endless debate, strongly stimulated by recent technologic advances in human reproduction, a synthesis between scientific data and hypothesis, philosophical thought, and issues of humanities has become a necessity to deal with ethical, juridical, and social problems. Furthermore, in this field there is a temptation to ask science to choose between opinions and beliefs, which neutralize one another. The question of when human life begins requires the essential aid of different forms of knowledge. Here we become involved in the juncture between science and religion, which needs to be carefully explored.

Key words: *beginning of human life - controversies - science - religions*

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One of the most controversial questions in modern medicine, bioethics, and science, is when does human life begin and is the fetus a person? The list of necessary conditions for being a person includes features like intelligence, self-awareness, self control, etc. The infrastructures of those abilities reside in the cortex that is well developed from the 30th week of gestation. From that perspective, every neonate or fetus during the third trimester of gestation is a person. The human being becomes a legal person with rights at the moment of birth. This legal definition does not mean that perinatologists do not have obligations to the fetal patient before birth. They clearly do, and must be balanced with obligations to the pregnant woman. Secular medical ethics is much better equipped than law to help the perinatologist balance obligations to the fetal patients and to the pregnant women in clinical circumstances.

The question of the beginning of human life relates to some of the most exciting and challenging ethical dilemmas facing scientists and medical researchers. We are witnesses of a growing amount of newspaper articles dealing with prenatal life. The problem of abortion is discussed among all circles of society, but, in addition, there are delicate problems regarding forced cesareans, prosecution of women for drug use during pregnancy, fetal protection policies, the use of fetal tissue for transplantation, embryo research, including research on embryonic stem cells, and disposition of frozen embryos. All of these ethical dilemmas raise the question of the moral and legal status of the unborn, resulting in many scientists, medical researchers, philosophers and politicians trying to answer the everlasting dilemma of whether the embryos and fetuses are part of the pregnant woman's body or are they persons? If they are thought to be persons, are they considered unborn children? Are they considered only as a part of the pregnant woman's body?

Different contexts of the beginning of human life give rise to inconsistencies. For example, in some countries women have been criminally charged for abusing their fetuses by using drugs during the pregnancy. In that situation, it is obvious that fetus is given rights. On the other hand, abortion which kills a human being, obviously does not respect fetal rights. The legalization of abortion itself was based in part on the unborn never having been recognized in law as a full legal person. Yet fetuses have been considered as persons for the purpose of insurance coverage, wrongful death suits, and vehicular homicide (Steinbock 1992). In the following text we will address the moral and legal status of embryos and fetuses.

A precise answer to the question "How to define human life?" is complicated. Today disciplines other than science, such as philosophy, theology, psychology, sociology, law and politics have varying perspectives on this question.

Some authors say that life as such does not exist, because no one has ever seen it. Szent-Gyorgy says that the noun "life" has no significance, because there is no such thing as "life". Le Dantez holds that the expression "to live" is too general, and that it is better to say a dog "dogs" or a fish "fishes" than a dog or a fish lives (Kurjak 1992).

When defining life, it should be considered not just life as it is today, but as it might have been in its primordial form and as it will be in future. All present forms of life appear as something completely new. Life is transferred and not conceived in each new generation. Furthermore, the phenomenon of life has existed on Earth for approximately 3.5 billion years. Consequently, although the genome of a new embryo is unique, the make-up of embryo is not new (Kurjak 2003). If life is observed through the cell, then every life, including human life, is considered as a continuum. Human cells and mankind have been existed on the Earth conti-

nuously since the appearance of the first man. However, if the definition of human life refers to the single human being or present population, then the statement "human life is a continuum" is not acceptable (Gilbert 1991).

Individuality, a most essential characteristic of individual human life, develops through evolution, characterized by phenotype, behavior and the capability to recognize and adapt. The human embryo and fetus gradually develop these characteristics. Today's research is tomorrow's benefit (Acog Committee Opinion 1994) concerning human life, and conclusions should not be only formed by one perspective. The embryo gives the biologist and geneticist substance for consideration, but the beginning of human life requires philosophical, anthropological, and theological consideration. This approach leads to the conclusion that it is necessary to reject reductionism as well as integrals and to find "golden middle" among these methodologies (Serra & Colombo).

The central ethical question in many debates concerns the passage from conception to birth. This question has been answered in many ways, and depending upon the answer certain ethical problems arise or disappear. On the many scientific perspectives people have used to answer this question in these ethical debates, one has been notably absent, i.e. the perspective of the evolutionary biologist. Given that evolution is a central theory of all modern biology, this absence is unfortunate.

The question of when life begins is an easy one to answer for an evolutionary biologist: life began over 3.5 billion years ago and has existed countinuosly even since without a single microsecond of disruption. All beings alive today are linked to the root of this tree by an unbroken chain of life that extends billions of years into the past (Templeton 2005).

We believe that the beginning of human life is not one question, but three. The first question is, "When does human biological life begin?", and is a scientific question that can be discussed using the "cluster concept." A cluster concept is defined by a related set of criteria such as genetic uniqueness, physiologic autonomy, self-regulating, capable of reproduction, and awareness when applied to the human species. It is clear that there are living human beings to whom at least one of the criteria do not apply. For example, a post-menopausal woman or a man with aspermia is undoubtedly alive, but both are incapable of reproduction. This example illustrates the advantage of the cluster concept: it is clinically useful, even when only some of the criteria constitute apply (Kurjak et al. 2007).

If we consider human embryology, we can find two answers, not one. First, distinct human life begins when there is a distinct entity, the pre-embryo, which is the structure that exists from the end of the process of fertilization until the appearance of a single primitive streak. Life does not begin earlier at fertilization stage, because the sperm and egg are alive before fertilization and the zygote is alive after fertilization, which led us to the conclusion that life is continuous throughout the entire process of fertilization. Second, individual human life begins later, with the emergence of the embryo. The pre-embryo, because it can divide into monozygotic twins is a distinct but not individual entity. The embryo, by contrast, can no longer divide into monozygotic twins and so it meets all criteria for being an individual (Jirasek 2001).

The second question is, "When do obligations to protect human life begin?", and is a question of general theological and philosophical ethics. The second question has no authoritative answer, because of irresolvable controversy in the world religions and in the global history of philosophical ethics about acceptable methodology and conclusions. Expecting a definitive answer to the second question is an exercise in futility for physicians and professional medical ethics (McCullogh & Chervenak 1994, Harrison).

The third question is, "How should physicians respond to disagreement about when obligations to protect human life begin?", and is a question for professional medical ethics. The answer to the third question, we argue, is that physicians should manage the controversy surrounding the second question by appealing to the ethical concept of the fetus as a patient. It is philosophically sound, respectful of all religious traditions and the person convictions of patients and physicians alike, and clinically applicable (Chervenak et al. 2007).

Defining personality is complex, as there is a lack of a clear definition. It has often been claimed that the English term 'person' has derived from the Latin term 'persona', which means a mask as used by an actor in a performance. One dictionary offers "what constitutes an individual as distinct person," but does not define what the "what" is. Another dictionary asserts "the state of existing as a thinking intelligent being." This definition might lead to the interference that personality increases pro rata with intelligence, or that some people may not have a personality at all, if we followed Bertrand Russell's dictum that "most people would rather die than think and many, in fact do." Ken Stallworthy's Manual of Psychiatry is more helpful with the definition that "personality is the individual as a whole with everything about him which makes him different from other people," because we can distinguish fetuses from one another and from other people. It also says, that personality is determined by what is born in the individual, and by everything, which subsequently happens to him (Beazly 1980).

It is useful to inquire what are necessary or sufficient conditions that must be fulfilled for being considered a person, in a moral or an ethical context. The list includes: minimum intelligence, self-awareness, self control, a sense of time, futurity and the past, capability of relating to others, concerns for others, communication, control of existence, curiosity, change and changeability, balance of rationality and feeling, idiosincrasy and neo-critical functioning. The anatomical location of the above-mentioned abilities resides in the cortex that

is well developed from the 30th week of gestation. From that perspective, every neonate or fetus during the third trimester of gestation could be considered a person. The same applies to a malformed fetus, such as Down Syndrome, even if the functions are not perfect. The same might be said for the live anencephalic fetus or the infant with only brain stem function. It is a human individual even it lacks a complete brain and survives after birth by only a few hours (Steinbock 1992).

There is no doubt that the embryo and fetus in utero are human individuals prior the birth. The child that is born is the same developing human individual that was in the mother's womb. Birth alone cannot confer natural personhood or human individuality. This is confirmed by preterm deliveries of babies who are as truly human and almost as viable as those whose gestation goes to full term (Kurjak 2003).

Legal capacity, as provided for by civil law, is an ability of a person to enjoy rights and obligations. Legally, the human being becomes a person at the moment of birth. This legal definition does not mean that perinatologists do not have obligations to the fetal patient before birth. They clearly do, and must be balanced with obligations to the pregnant woman (McCullogh & Chervenak 1994, Chervenak et al. 2007). Secular medical ethics is much better equipped than law to help the perinatologist balance obligations to the fetal patients and to the pregnant women in clinical circumstances. Secular medical ethics has the ability to deal with complicated clinical situations. It respects the whole myriad of religious beliefs, but does not insist on any one (McCullogh & Chervenak 1994, Chervenak et al. 2007).

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