

Investigating The Life Condition in Embryonic Cells and Symptoms of Breathing Embryonic Soul, Regarding to the Qur'an and Shiite Hadith

Abstract

The rapid development of biotechnology and its presence in the various spheres of human social life is bringing new issues every day to different fields of science. Using a descriptive-analytical method, this research aims to answer the questions, "how is the embryonic life and when is the beginning of soul, regarding to the Qur'an and Shiite Hadith?", and "is determining the exact time of breathing soul in the fetus an intentional obligation or is it associated with symptoms that can be seen with the development of the fetus?" According to the Qur'an and narratives, embryo, a few days before the implantation stage, has vegetative life, not plant and human life. The embryonic cell during the period when the physical creation of fetus in womb is not complete does not have a human life and so it is not an actual human being. Then, the state in which the spirit is blown into the fetus starts with the movement of the fetus into the body of the mother and is considered to be alive human. This honored soul (*al-nafs al-muhtaramah*) refers to a stage of embryonic development in which the human soul is blown up (*wulūj*). Additionally, acceptance of a specific time for breathing the soul is not an intentional obligation (*ta'abbudī*) and unchangeable matter, but the birth of the soul does not have a specific and definite time such as the end of four months, etc. Also, the diagnosis of this natural phenomenon will be based on its natural symptoms that may be before or after the age of four months, or they may be realized at different times in different cases and living conditions.

Keywords: Embryo, Human Life, Shiite Hadith, The Qur'an, Wulūj (Blowing Up)

INTRODUCTION

Embryologists divide human development and growth into three parts: 1. The pre-embryonic phase (from zero hour of growth until the end of the second week). 2. The embryonic stage (beginning of the third week until the end of the eighth week). 3. Fetal stage (from the beginning of the ninth week until birth) (Sadler, 1996: 46).

The first egg cell division occurs about 30 hours after fertilization. It is cut from the length of the slit into two cells: Meiosis divisions continue to reach a 16-celled mass called morula that lasts about three days. This 16-cell Morula traverses the uterine tube into the uterus, and gradually the intercellular spaces are interconnected and a hole is created inside (Ibid: 34-40). At this time, the embryo is called Blastocyst and the embryo has a life span of about 4/5 days. As a result of the internal cavity, the blastocysts are divided into two parts: 1- The inner cell mass called the

ambroblast, which later forms the true embryo. 2- An outer cell mass called a trophoblast, which will later form the placenta (Loqman-zadeh, 2003: 427-428). Embryo has a life span of about 6 days and is a two-fold embryo by this time. At the end of the first week, embryonic trophoblast cells penetrate the lining of the uterine mucosa with the help of embryonic enzymes. By the end of the first week, the egg cell (zygote) of the morula stage has passed the blastocyst and has begun implantation in the uterine mucosa (Ibid: 36). At the end of the second week, about two-tenths of the embryo's growth has turned into a double-layered germinal tablet, implantation into the uterus completes and placental uterine circulation is begun (Ibid: 46). The period from egg formation until embryonic differentiation is called Embryonic period (Larijani, 2005: 106).

The embryonic period ends at the end of the eighth week with the initial formation of most tissues (Sadler, 2003: 87), and what happens from the end of the embryo to the termination of pregnancy is the growth and differentiation of the structures formed during the embryonic stage. The interval between the end of the embryonic period to birth, that is, from the end of the eighth week to the end of thirty-eighth, is called the fetal period (Ibid: 117). In summary, the timing of pregnancy events, respectively, is included:

- 1- Egg-to-morula periods (up to the fourth day),
- 2- Implantation (about the tenth day),
- 3- Blastocyst (until the third week),
- 4- The Embryonic Period (third to Eighth Week),
- 5- The fetal period (the ninth week until the end) (Moore, 2003: 3).

The unique capabilities of embryonic cells have attracted the attention of medical and biomedical scientists and have led to a new approach in modern medicine and reconstituted medicine, for these cells are at a stage of growth (eventually 14 days) of differentiated cells. Unlike other cells, they have the ability to combine proliferation and differentiation, meaning they can both transform to another cell and produce their own, in other words they can self-renew. The major challenge in acquiring these cells and utilizing their features in research and treatment is that they must be obtained at a stage of growth (eventually 14 days) and terminate their potential in the pathway to human embryogenesis.

The key question, therefore, is that when is the beginning of human life? It is a major challenge for Muslim scholars seeking to find these cells in reconstructive medicine and modern medicine. Based on studies, their views are different in this regard. Shiite exegetes believe that the intellectual soul (*al-nafs al-nātiqa*), which is the criterion of being human, is different from the cellular life that exists in the fetus before four months of age. Accordingly, based on a descriptive-analytical method, this research will first clarify the meaning of life, the types of life, the

boundaries of human and vegetative life, the areas of recognition of life in the Holy Qur'an and the Shiite Infallible Imams' narratives, and then will answer the question that "how is the embryonic life, regarding to the Qur'an and Shiite Hadith?"

1. The Life of Embryonic Cells

Before speaking about the wulūj (blowing up or breathing) of the spirit, briefly the meaning and types of life as well as stages of life in embryonic cells, especially with regard to the Qur'an, are pointed out here.

1-1. Life

The word "Hayāt: life" is originally derived from the term "Hay" ("al-Hayāt") and literally means the opposite of "death" (Ibn Manẓūr, 1416 AH, v. 7 & 14) and on the other hand it is also called life, which is precisely against death (Dekhodā, 1994, v. 6). Death is also a tangible event that one experiences many times in others' life (Turayhī, 2002, v. 1).

1-1-1. Types of Life

By thinking on the verses of the Holy Quran we can divide human life into two categories

- 1- Vegetative life (Cell) 2- Human life (Intellectual)

A) Cell (vegetative) life

Vegetative life is a life that belongs to all living beings that possess the properties of growth, nutrition, etc.; in vegetative life, which is also referred to as "cell life", there is no sense in perceiving the voluntary notion and motion.

B) Human life

In the valid arguments of the Shi'a jurisprudence (the Book and the Sunnah), the boundary of the separation of vegetative and human life has been recognized as the granting of the spirit of wisdom which in addition to the features of vegetative life, some characteristics such as stillness, understanding the partial and general affairs have given the title of human life (Sobhani, 2011: 107).

1-1-2. The Holy Qur'an and the Stages of Life in Embryonic Cells

The holy Quran, in verses 12 to 14 of Surah Mu'minūn, has explained different stages of embryonic life:

"And indeed, We created man from The breed of mud" * "In the second yet lasting stage of man's creation after `Adam [We Created man by placing a sperm

in a Secure place,] the mother's womb” * “Then We made the sperm into a clot, Then We made the clot a lump of flesh, Then We turned the lump into bones, Then We dressed the bones with flesh. Then [by envoying soul into the body] We Made a complete creation: The Source of Blessings is Allah, the Only Creator!”¹

In these verses, God describes the quality of human creation and the stages of embryo development in the womb and divides them into two stages of vegetative and human life, expressing the characteristics and states of this embryonic period as follows:

1. Sperm: "ألم يك نُطْفَه مِن مَّيِّ يَمِي": "was not he but a drop of sperm poured Forth?] In his mother's womb” (Qiyāmah: 37), was not the human a drop of sperm that first flowed to the womb? Sperm is a clear blue water that lasts up to 40 days from the first hour of fertilization (Rāghib, 1373 AH: 496). In fact, it means little water and then its application is equivalent to male sperm or sex cells (Abd al-Jabbari, 2009: 31).

2. Clot: The literal meaning of clot is to cling to something or solid blood, at which point the embryo is transformed into thick, solid blood, or in the term blood clot. The ovum, after fertilization, flows into the uterine tube to the uterine cavity to settle into the uterus, which in embryology is referred to as egg implantation. The establishment of the egg in the uterus is accomplished by bumps that are the true sequences of the egg, which grow like roots in the soil to retrieve what is needed for the growth of the egg from the organ wall. This process completely clings the egg to the uterus, and the Holy Quran has mentioned it five times. As a result, the clot may mean suspended or hung, or other meanings, such as leeches, may be correct (Qurashī, 1985, 5: 31).

3. The third stage in the developmental phase of the fetus is a condition called "Lump of Flesh", in which it is triggered to convert the clot to a piece of flesh. The Lord says in Surah (Hajj: 5):

« فَأَنَّا خَلَقْنَاكَم مِّن تَرَابٍ ثُمَّ مِّن نُّطْفَةٍ ثُمَّ مِّن عِلْقَةٍ ثُمَّ مِّن مُّضْغَةٍ مُّخَلَّقَةٍ وَغَيْرِ مُّخَلَّقَةٍ »

“We first created your kind (‘Adam) from dust, then after that Created you from sperm, then it became A blood-clot, then it became a lump of Flesh, part of it had its form and part of it without any form.”

In the interpretation of a "lump of flesh" it is said to be "a piece of chewed meat as much as a mouthful" (Ṭabrisī, 1998, 4: 180).

It is at this stage that the ability of the fetus becomes clear for receiving the human form and proceeding to the next steps to become a full human. In some cases, the fetus may not be able to do so and may end up either aborting or seriously harming its health. God has referred to this

¹. « وَ لَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ سَلَالَةٍ مِّن طِينٍ * ثُمَّ جَعَلْنَاهُ نُطْفَةً فِي قَرَارٍ مَّكِينٍ * ثُمَّ خَلَقْنَا النَّطْفَةَ عَلَقَةً فَخَلَقْنَا الْعَلَقَةَ مُضْغَةً فَخَلَقْنَا الْمُضْغَةَ عِظَامًا فَكَسَوْنَا الْعِظَامَ لَحْمًا ثُمَّ أَنْشَأْنَاهُ خَلْقًا آخَرَ فَتَبَارَكَ اللَّهُ أَحْسَنُ الْخَالِقِينَ ».

fact in terms of "formed" and "unformed". Allameh Tabātabā'ī has considered the "formed" in the sense of being created completely and "unformed" in the sense that his creation is not finished (Tabātabā'ī, 2014, 14: 385).

It is said in Makhzān al-'Irfān that after forty days there is a change in the lump of flesh and then by the power of God (this piece of flesh) is formed; either the body is formed in its entirety, which is called "formed" or his formulation is incomplete that is called "unformed" (Amin Isfahānī, 1982, v. 8: p. 324).

4- Bones, at this stage the bones are made of cartilage but the surrounding meat has not yet been created. According to this process, the lump of flesh turns to bone and with the emergence of bones, the embryo takes human form.

At this stage, the embryo, which has become a lump of flesh and chewed flesh, transforms and becomes bone cells. God refers to this stage: (فخلقنا المضغه عظاماً) So after the sperm has passed through the phase of clot and flesh, all of its cells become bone cells, and then it is covered by the muscles and flesh (Makarem Shirazi, 1974, 16: 213).

5. In this phase, the flesh grows around the bone. The final stage of the major change and physical completion of the fetus's body structure is that the bones are covered with flesh, nerve, large and small veins, and a beautiful skin as a garment is pulled over to protect the flesh (Ibid, 14: 212). The final stage is the phase in which the soul is blown to the fetus and the fetus becomes a perfect human (Qu'ran, Mu'minūn: 12-14).

6. The important difference that exists at this stage and makes a major difference with previous stages is that the fetus enters human life at this stage, finds motion and feeling. In religious texts, it is referred to as the phase of blowing or breathing (*wulouj*) the soul.

Motion and movement, which is one of the signs of human life, does not exist in the sperm because at the beginning it only has one type of vegetative life. Eventually, this sperm in the phase of blowing the soul has been evolved and has entered the realm of human life. "The genitive case and proportion of the soul to God in «نفخت فيه من روحى» is a ceremonial genitive in the literary sense, meaning that a noble and precious soul worthy of being called a divine spirit is blown to man, just as the Ka'ba is called Bayt Allah (Home of God) because of its greatness and Ramadan is called Shahr Allah (Month of God) because of its blessings" (Abd al-Jabbari, 2009: 33; Abbasi, 2003, v. 5).

Allameh Tabātabā'ī states under the interpretation of the holy verse 14 of the surah Mu'minūn that the Holy Qur'an expresses human creation in the word of origination that means creating something and nurturing it. «ثم انشأناه خلقاً آخر»: In this holy verse, the divergence from creation to origination is due to the verse's implication on another truth that has been created. The pronoun in "انشأناه" goes back to the human being where the bones were covered with meat. That

is, after the initial stages (physical and vegetative creation) a new creation is originated and human life begins and a dead, ignorant, and impotent substance becomes a living, aware, and capable being (Tabātabā'ī, 2014, 15: 20 & 21).

Ayatollah Makarem Shirazi, while dividing the stages of embryonic life, states in the expression of fetal states:

A) When creating a fetus is not complete in the womb, such as when it is a sperm, a clot, or a lump of flesh, and the bone is covered with flesh, it is not referred to as the actual human being, neither alive nor dead.

B) The state that the vegetative creation of the fetus has been finished, and before blowing the soul, at this stage, as in some traditions, is similar to that of a human being.

C) The state in which the spirit is blown into the fetus starts by the movement of the fetus into the womb of the mother and is considered to be an alive human. "That's where the fetus is called human from and killing him is like killing a human being" (Makarem Shirazi, 1974, 14: 212 & 213).

2- Investigating the Symptoms of Breathing the Spirit in the Fetus

The human spirit is a wonderful and transcendent phenomenon that is a reality other than the earthly body, that is investigated in this research through which the quality of relations and mutual effects of these earthy and transcendent realities will be clear. This valuable divine creation has long occupied the minds of philosophers and theologians in the field of Islamic civilization and has given rise to wide-ranging issues such as the abstraction or non-abstraction of the soul before and after the creation of the body or along with its creation. Regardless of judging such debates or choosing some assumptions in this regard, there is no doubt that at a stage in the course of human development, there is a happy connection between the soul and the body, which the Holy Qur'an has referred to as the "breathing of the spirit in the body". The beginning of this relationship, which in the jurisprudence is interpreted as the breath of the spirit, has been the subject of some religious rulings and decrees. But what causes ambiguity to this concept in jurisprudence is two questions:

1- Does spirit means an abstract and supernatural reality whose time of breathing and blowing is only determined by the prophets and the Imams?

2. Does spirit means an animal life, or other natural matter that the fetus enters it during its growth stages after leaving the vegetative stage?

The difference between these two interpretations is that, by the second meaning, we do not have to look for a specific time, such as the end of the four months, to breath the soul, but rather (to

recognize this natural phenomenon as other natural phenomena) based on its natural effects such as the motion of the fetal heart. And as her organs are completed, the voluntary movements of fetus in the womb will be activated by some of her senses, such as a sense of touch in time. These effects may occur before or after 4 months or may occur at different conditions and at different times.

Therefore, it is first necessary to clarify what is meant by the breathing of the spirit in the Qur'an, narratives and jurisprudential sources. Secondly, how can one recognize that the breathing of the spirit has been fulfilled? Is there a time limit for it? Thirdly, what interpretation does medical science offer for the breathing of the spirit and its timing for the fetus and the natural effects of this phenomenon? Fourth, is it possible to access the scientific collection of verses, narratives, jurisprudential sources, and medical knowledge?

Articles 487 and 492 of the Islamic Penal Code and Article 91 of the Ta'zīr Law refer to the necessity of the breathing of the spirit in the fetus. The first two articles set out the rules on the *dīya* (financial compensation) of the abortion before and after the breathing of the spirit, and in the third article, the sentence of retribution for abortion of the fetus having spirit has been stated.

In all three articles there is no explanation on the breathing of the spirit and the ways of its diagnosis. The present article can also be a step towards clarifying these legal provisions.

Explaining the timing of the spirit's breathing and identifying its symptoms in the fetus will also differentiate between cellular and human life and can help clarify the legal and judicial aspects of embryonic stem cell extraction. As a result, it can be said that recognizing the quality of spirit's breathing will be the subject of many religious laws.

2-1. The Spirit's breathing in the Holy Qur'an

The five verses of the Holy Quran explicitly speak of breathing of the spirit. There are two holy verses about the Prophet Adam (PBUH) (Hijr: 28-29), which, with the induction of characteristic, apply to other humans. The other two verses are about Prophet Jesus (PBUH) (Anbīyā': 91). The fifth verse, though, is likely to be about Prophet Adam (PBUH). It seems to be about all of humans (Sajdah: 7-9). By thinking in Surah al-Mu'minūn: 12 to 14, the creation stages of the human have been mentioned including the stages of embryo, clot, and lump of flesh, bone and meat. At the end it is added that We create a different creation.¹

Of course, there are more cases of the use of the Spirit in the Qur'an, and in some of them the phrase (the Holy Spirit) has been expressed as confirming Jesus (PBUH) (Baqarah: 87; Mā'idah:

¹ . ثم خلقه النطفه علقه فخلقنا العلقه مظغه فخلقنا المضغه عظاماً فكسونا العظام لحماً ثم انشأناه خلقاً آخر فتبارك الله أحسن و لقد خلقنا الأنسان من سلاله من طين ثم جعلناه نطفه في قرار مكين.

110) or an angel of the same name, or (the Gabriel) sending the Qur'an to the Prophet (PBUH) (Naḥl: 102; Shu'arā': 193). Some verses say that believers are spiritually confirmed (Mujādilah: 22-31). In one verse, Jesus is referred to as the Spirit (Nisā': 32-171), and in one case the Spirit seems to have been adapted to the Qur'an (Shū'rā': 33-52). Another application of (spirit) is about the angel who appeared to Mary (Maryam: 17-34). In some cases, the spirit has been considered among the angels including the agents of God's creation (Naḥl: 2; Qadr: 4; Mi'rāj: 4), and finally, in one case, the truth of the spirit is questioned and answered (Say: The spirit is from my Lord (Asrā': 85)). Surely, in these verses the spirit in the Qur'an has two true uses: the first is the human soul and the second is the creature like the angels.

The meaning of the word (soul) is a creature that is the source of life (Rāghib, 1373 AH: 210; Tabātabā'ī, 2014, 20: 189) and this meaning is found in all cases of the use of the soul in the Qur'an (Mesbah Yazdi, 2015, 1: 365).

From the five verses on the breathing of the spirit, the relationship between clearings, which means the fullness of physical creation and the breathing of the soul. It also mentions the implicit concept of breathing the spirit, especially the verse 14 of the surah Mu'minūn, which mentions the breathing of spirit as another creation, and one can say this stage of human development, if not immaterial, is not at least of the stages of material and physical creation, and is a superior stage that leads to human life. Using verses related to the creation of man, as well as the narratives on the above verse, we conclude that the purpose of God for a different creation in this verse is the breathing of the spirit in the human fetus.

2-2. The Breathing of the Spirit in Narratives

Among the narratives on Diya of abortion, Saeed bin Musayyib's narration from Imam Sajjād (AS) is explicit in proving this claim (Kulayni, 1983, 7: 347; Tuṣī, 1414 AH, 10: 282). He asks the Imam (PBUH) about the Diya of abortion, and the Imam (PBUH) states the Diya of various stages of the abortion and finally says:

“And if the woman aborts her fetus, who has become a human having bones and flesh so that his organs are recognizable, and the spirit of reason has been blown to him (harming the woman) has a full Diya (blood money). Saeed bin Musayyib says: I asked Imam (AS): Do you think the movement of fetus in the womb is due to the soul or not? The Imam said: It is because of the soul. But a soul other than the former life which has been in the back of men and womb of women, and if there is no soul in the fetus other than life, it will not move in the womb, and yet the (complete) Diya will not be on its killer.” (Hurr Āmilī, 1414 AH, 29: 316)

This narrative, in addition to implying the breathing of the human spirit (referred to as the spirit of reason) after the complete creation of the fetal organs (while the fetus is in the womb) also

implies on the existence of vegetative life before the realization of animal and human life. Another important point in this narrative is that the Imam (AS) has considered the movement of the fetus in the womb which is one of the effects of the animal spirit as a sign of breathing of the human spirit, and it will have an important consequence that we will examine afterwards, which is the coincidence of the emergence of the animal spirit and the human spirit in the fetus.

Narratives on the breathing of the spirit in the fetus can be found more in the hadiths about the Diya of various stages of the creation of the fetus. Therefore, a careful examination of these narratives can help in true understanding the concept (breathing the spirit). In some of these narratives, the last stage of fetal development is the origination of the soul,¹ the blowing of the soul,² breathing of the soul,³ and the final creation:⁴ All of them have a full Diya (thousand dinars) for this stage of embryo creation.

But the appearance of many narratives that have divided the fetus into various stages of development, including the breathing of the soul, is that the breathing of the soul occurs when the child has the title of a fetus, and certainly the embryo refers to a child who is still in the womb and has not been still born. In addition, in some narratives that various stages of the development of the fetus have been scheduled (will be explained in detail) and the last stage, has been mentioned as the soul's breathing stage. It has been mentioned in two narratives after four months and in one narrative with an earlier stage after four months. However, it is likely that the soul's breathing phase will be realized five months after the four months of birth, and there is no clear narrative that it will be achieved immediately after the fourth month. But such an understanding of the narratives seems unlikely, and it appears that this stage occurs immediately after four months or at a later stage in embryonic life. The breathing of the soul takes place before birth and during the period when the fetus is in the womb.⁵

Lack of separation between the animal soul and the human soul in the narratives of the Diya of the fetus and the conveyance of the meaning of the soul requires a customary understanding that defines the breathing of the soul as the customary meaning of the life and vitality of the fetus, and this meaning is a concept of life that is common between animal and human life.

1 «... فاذا انشا فيه خلق آخر و هو الروح فهو حينئذ نفس: v. 1: p. 312: «... فاذا انشأ فيه الروح فدينه الف دينار...» Ibid, p. 229: v. 1: «... بالف دينار كاسته ان كان...»

2 «...» Ibid, vol. 1: p. 312: «... و في الصورة قبل ان تجبا الروح ماده دينار فاذا ولجتها الروح كان فيها الف دينار...» Ibid, vol. 10, p. 318: «... فاذا كان جنيناً قبل أن نتجه الروح ماده دينار»

3 «... مخلقه له عظيم و لحم مزيل الجوارح قد نفخت فيه روح العقل فأن عليه ديه كامله...» Ibid, v.8, p. 316:

4 «... قال الله عزوجل: ثم انشأناه: v.9: p. 317: «... فاذا انشا فيه خلق آخر و هو الروح فهو؟؟؟ نفس بالف دينار كامله...» Ibid, v.9: p. 312: خلقا آخر فتبارك الله أحسن الخالقين، فان كان ذكرًا... و فقيهه الديه و ان كانت انشى فقبها دينها

5 This view is opposed by some scholars, such as Fakhr Rāzī, who see the birth time as the time of breathing the spirit (Fakhr Rāzī, nd, v. 23: p. 85). Sunni scholars' views will be studies in another article.

Therefore, the implications of the Holy Qur'anic verses and many narratives, including the narratives of the Diya of fetus, seem to be:

1- Since most of the narratives about the fetus have no definite time for the phenomena of breathing the soul, it is only to express the termination of the verdict of full Diya for this phenomenon, which means that the phenomenon of breathing the soul is recognizable and identifiable as a custom for the audience of that period, and it cannot be considered as an occult and supernatural phenomenon that lacks natural effects and the timing of its realization is undetectable.

The best way to justify such a fact that is inherently abnormal and has natural effects (given the lack of distinction between the human spirit and the animal spirit in the narratives) is that this phenomenon occurs simultaneously with the breathing the animal soul in the fetus and thus it is recognizable through the effects of animal life like voluntary movement and receiving sensory messages through sense of touch or other senses that are inherent to the animal's life¹

2 - The soul's breathing comes after the completion of physical creation of the fetus and the formation of all its organs. This fact is clearly applicable as well as the verses of the Holy Quran which express breathing the soul after the clearings of the fetus.

3- Blowing the Spirit although inherently immaterial, it has material and physical effects that are recognizable to the general public.

2-3. Symptoms of blowing the spirit in the fetus

In the narratives, blowing the spirit in the fetus is presented with symptoms that indicate that blowing the spirit is normally recognizable and identifiable to the audience and cannot be regarded as an absent phenomenon without natural effects (see: Ahmad-Khanbeigi, 2010). Also, the diagnosis of blowing the soul is the subject of different judgments, so it must have common signs and effects and be recognizable to the general public. These symptoms in the narratives, although different in content, can be divided into several categories.

2-3-1. The Spirit's Blowing relying on the Symptoms of Physical Growth and Development

Although the soul and its blowing in the body is not of the material and physical effects on the human fetus, but the embryo, from the earliest stages of development, which is no more than a sperm, seems to have a vegetative life and its effects, namely growth and nutrition, but only after the completeness of physical creation, it owns the soul.

¹ Philosophers and theologians have said in the definition of the plant: (the creature that nourishes and grows) and they have said in the definition of animal: (the creature that nourishes and grows, is sensitive and has voluntary motion) (Sabzevārī, 2012, 1: 74).

A) Growth of the Flesh

In the two narratives of Masma and Abū Jarīr Qumī, the attachment of the soul to the fetus has been established after the flesh covering of the bones.

In the narration of Masma, which deals with the Diya of different stages of the fetus, it is quoted by Amir al-Mu'minīn (AS):

“The Diya of a fetus is one hundred dinars, the male sperm becomes five components until it becomes an embryo; if the fetus is complete, before the soul is breathed, its Diya is one hundred dinars, if the flesh is grown with bones, its Diya is one hundred dinars; if the soul is breathed in it, the fetus is a human whose Diya is a thousand dinars.” (Kulaynī, 1983, 6: 342)

In this narrative, the Imam (AS) first described the Diya of fetus as one hundred dinars, and then, in order to explain what he meant, he divided the Diya of fetus into three types: The Diya of imperfect fetus, the Diya of perfect fetus before blowing the soul, and the Diya of fetus after blowing the soul.

From the spermatic stage to the appearance of the flesh coverage, its Diya is less than one hundred dinars, at the stage where the fetus is covered with flesh referred to as the whole fetus, the Diya is one hundred dinars, and after that the fetus is given a soul, its Diya is the Diya of the perfect human and it is one thousand dinars, so it is well-known from this hadith that the blowing of the spirit into the fetus is after the appearance of the flesh.

In the narrative of Imam *Kāzīm* (AS) quoted by Abū Jarīr Qumī, and according to Surah Mu'minūn: 14, the Diya of the fetus after blowing the spirit, which is after the growth of flesh on bones, is the Diya of a perfect man or woman (depending on the gender of the fetus) (Tūsī, 1414 AH, 10: 282, No. 1102).

B) The completion of the fetus' body

In the narrative of bin Miskān, Imam Sādiq (PBUH) considered the origin of the soul after the fetal body was complete and stated: Whenever the fetus's body is complete, its Diya is a hundred dinars, so if the soul is breathed in it, its Diya will be a thousand dinars (Kulaynī, 1983, 7: 313).

C) Finding the human face

Amir al-Mu'minīn (AS) mentions the emergence of the human face and form as one of the embryonic stages, and states: "If the crime occurs against the pregnant woman, while the fetus has no soul, the Diya would be a hundred dinars and if the spirit is blown in it, the Diya is a thousand dinars" (Sheikh Mufīd, 1414 AH: 119). It is well understood from this narrative that

breathing the soul in the fetus is realized only when the fetus has found a human appearance, which is called 'clearings'.

2-3-2. The Blowing of Spirit in terms of the Time

In some of the narratives, the blowing of the soul is accompanied by time signs and they are divided into three groups.

A) Completion of four months

The two narratives, both quoted by Imam Reza (AS), mentions the end of the four-month period when the spirit was given to the fetus.

In the narrative by Kafī, Imam Reza (PBUH) first points out that the semen remains forty days in the womb, then it is in the form of clot for forty days, and forty days in the form of flesh, a total of hundred-twenty days equals to four months. It is after this time that God sends his two formative angels to the fetus to chart his future life (Kulaynī, 1983, 6: 13).

The narrative of *Qurb al-Isnād*, though similar in content to the earlier narrative, but mentions the embryonic development periods of four thirty days instead of three 40-day periods (Himyarī, 1413 AH: 154-155). Although neither of these two narratives speaks of the giving of spirit at the age of four months, it merely states that after four months, God sends two angels into the fetus, but by attaching them to the narrative of Zurārah from Imam Bāqir (PBUH), we know that the first task of these two angels is to breathe the soul into the fetus (see: Kulaynī, 1983, 6: 13-14).

In addition to the previous two narratives, Saeed bin Musayyib's narrative from Imam Sajjād (AS), which has also been mentioned previously, although has no reference to the end of the four months, but the Imam (AS) counting three forty-day periods; sperm, clot and flesh; and proclaims that after this 120-day stage the fetus has a perfect body, in which the spirit of reason is blown (Ibid, 7: 347).

Therefore, from all these narratives, it can be concluded that the blowing of the spirit is after the end of the four months of the fetus.

B) Three forty-days period

In the narrative of Zurārah from Imam Bāqir (PBUH) mentioned above, without mentioning the time of the blowing of the soul, the first three forty-day periods have been described for the development of the physical dimension of man, which include: Sperm, clot and growth of flesh on the bones, then Imam (AS) reminds that after these steps, God commands his angels to breath the spirit in the fetus (Ibid, 6: 13-14).

C) Completion of Five Months

In narrative societies, there is only one narrative that announces the time of breathing the soul in the fetus at the end of five months. In the narrative of Yūnus Sheybānī, whose subject is doubt on the life of the aborted fetus, Imam Sādiq (AS) considers payment of a full Diya if the fetus is five months old; the result will be that before the fifth month is over, the fetus has no spirit;

«قلت لأبي عبد الله (ع): ... فأذا وكرها فسقط الصي ولا يدري أحيى كان، أم لا؟ قال: هيهات يا أبا شبل، إذا مصت الخمسه اشهر فقد صارت فيه الحياه، وقد استوجب الدية» (Ibid, 7: 346).

I said to Imam Sādiq (AS): "... if anyone punches a pregnant woman so that her child is aborted and doesn't know if she is alive?" Imam said: "Oh, Aba Shabl, if the fetus is five months old, he has the spirit of life and is obliged to complete Diya."

2-3-3. The Spirit's blowing up in terms of the Physical Symptoms

Some of the narratives that have been made about the inheritance of the fetus have referred to the symptoms of the breathing of the soul, which are purely superficial and transcendental, and can be seen by all, which include:

A) Crying

Sheikh Tūsī quotes two narratives of Imam Sādiq (AS) that the criterion of being alive is the crying of the fetus.

In the narrative of Suleiman bin Saleh, the Imam (AS), after expressing the Diya of fourfold stages of sperm, clot, flesh, and bone, states: If the bone is covered by flesh, then the Diya is one hundred dinars until the voice of the fetus is heard, in which case the Diya is complete (Tūsī, 1414 AH, 10: 281, No. 1100).

Also in the narrative of Abdullah bin Sinan, the Imam (AS) emphasized that it is necessary to read the funeral prayer on a fetus that has cried after abortion and then died; otherwise the funeral prayer is not permissible for him (Tūsī, 1984, 1: 480, No. 1857).

Certainly, weeping for a fetus is possible only when it is born and come out of the womb, therefore it is said that according to these two narratives, the complete Diya belongs to the fetus when it is born, weeps, and then dies, while according to past traditions, paying full Diya only becomes necessary when the fetus has a soul, that is, after the period of flesh growth and before the birth.

B) Moving

In some narratives, instead of crying, movement has been described as a sign of the fetus being alive, because if a fetus is born but unable to make a sound, such as being deaf and dumb, he cannot cry, a way of recognizing that the fetus has a soul, then he is dead or before birth he is dead, there is no way to recognize this except for the moving and not moving of fetus.

Imam Sādiq (AS) states in two narratives of Rabī'ī and Abi Basīr: If the fetus can move its body after abortion, then this movement may be a reason for its being alive and having a soul, though he is dumb and cannot cry and make a sound (Kulaynī, 1983, 7: 155; Tūsī, 1414 AH, 9: 392, No. 1398).

It seems that weeping and moving cannot be a criterion for recognizing the soul's attachment to the fetus, but it is merely a sign for the fetus as being alive at the time of birth; that is, if the fetus is born and we do not know whether he is dead before birth or after birth, we can recognize this by his crying or moving. In other words, the premise of the earlier narratives is the certainty that the fetus is alive, and the premise of these narratives is a doubt that the fetus survives after breathing the spirit. Therefore, if the fetus is aborted and dies from the end of the minimum time needed for pregnancy until the end of pregnancy (between the 7 to 10 months) and we do not know whether his death was postnatal or prenatal in the mother's womb; by some signs such as her moving, screaming and so on, it can be determined whether the fetus is dead or aborted after birth.

C) Opening the eyes and ears

In the narrative of Muhammad bin Muslim, Imam Bāqir (AS) states: When a complete Diya is paid for a crime against a fetus, it is necessary the eyes and ears of the fetus have been opened and his organs have been completed (Kulaynī, 1983, 7: 345). In the narrative of Imam Bāqir (AS) quoted by Zurārah: After the completion of physical dimension of the fetus, God sends two angels to him. The two, breath the into the fetus and enable his eyes, ears and all of his organs due to the command of God (Ibid, 6: 13-14).

Clearly, the opening of the eyes and ears doesn't mean to enable the eyes and ears into the womb, but to mean that they are capable of functioning from this time onwards, a function that has not been provided until this time. The reason for this subject is mentioning other organs beside the eyes and ears.

3. CONCLUSION

According to the Qur'anic verses and narratives on the beginning of Sharī'ah-sponsored human life, it is concluded that:

1. An embryo, a few days before the implantation stage, has vegetative life, and the extraction of stem cells and the destruction of egg cells are out of the growth of plant life, not human life, although according to Islamic thinkers, the egg cell has the right to life from the beginning.

2. The embryonic cell during the period when the physical creation of the fetus in the womb is not complete, such as when it is *nutfa* (sperm), *'alaqa* (clot), or *mudqa* (chewed meat) or before the bone is covered by flesh, in the stage of implantation, does not have a human life and so it is not an actual human being.

3- When the vegetative creation of the fetus is finished and before the spirit is breathed, at this stage it is as in human traditions that it is similar to dead human.

4- The state in which the spirit is blown into the fetus starts with the movement of the fetus into the body of the mother and is considered to be alive human. This is where the human embryo is referred to and its destruction is like killing a human being.

5- According to the verses of the Holy Qur'an, it seems unlikely that the honored soul (*al-nafs al-muhtaramah*) refers to a stage of embryonic development in which the human soul is blown up because the criterion of human life is *wulūj* (blowing up) of the soul in the body after its completion. The meaning of the soul in the Holy Qur'an is the intellectual soul, which is interpreted as *nafs al-nātiqah* (intellectual soul) in wisdom (See: Ahmad-Khanbeigi (2009)). In our narratives, this spirit is referred to as the spirit of life and survival, which implies its abstraction and immateriality. This rational spirit, which is the criterion of being human, is different from the cellular life that exists in the fetus before four months of age and thereafter.

6- Acceptance of a specific time for breathing the soul is not an intentional obligation (*ta'abbudī*) and unchangeable matter. The birth of the soul does not have a specific and definite time such as the end of four months, etc. The diagnosis of this natural phenomenon, like other natural phenomena, will be based on its natural symptoms, such as the heartbeat of the fetus and with the completion of its organs and parts, the voluntary movements of the fetus in the womb, the activation of some of its senses such as tactile sensation in time. These symptoms may be before or after the age of four months, or they may be realized at different times in different cases and living conditions.

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