

Brain Death By HG Bishop Serapion

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Brain Death

If a question is posed to a group of ordinary people about what are the criteria in determining a person's death, they will probably agree on a common answer. However, in a Western society such as the U.S., if this same question is presented to a group of physicians, scientists, and lawyers, they will need to hold a conference. In the end, they may or may not reach an agreement. Medical facts resulting from scientific development contradicts the common belief that death is determined only by the cessation of respiration and heartbeat. A perfect example of such a situation is a patient kept on life support in an intensive care unit in a hospital, where both his heartbeat and ventilation are maintained. According to the widespread criteria for determining death, that patient would be considered "alive". If life support is withdrawn, the heart will stop beating and breathing will cease; that person will be considered "dead". Besides, being on life support does not cause any progress in the patient's condition. Therefore, from the practical and scientific standpoints, that person is "dead". Scientific development has led to complications in the issue of determining a person's death. It extends beyond the fact of just cessation of heartbeat and breathing. Prior to withdrawing life support from a patient in an intensive care unit, there must be a firm and definite determination of his death. Otherwise, we would face a case of murder! Consequently, nowadays, we tend to determine death by the presence of "brain death".

What is the meaning of brain death? What are its criteria? "Brain death" means total cessation of all integrity of brain functions resulting from complete damage of brain cells. A major portion of the brain may temporarily stop functioning as in cases of coma, but this does not constitute brain death. One of the most famous criteria used by physicians is the one used at Harvard University Medical School and is known as the Harvard Criteria. Medical examination must confirm the presence of the following criteria in the patient:

1. Absence of receptivity

2. Absence of responsiveness

3. Lack of spontaneous movements, including spontaneous breathing

4. Absence of reflexes

5. Fixed, dilated pupils

All the above should continue for a period of 24 hours and all the clinical criteria must be supplemented by absence of electrical brain activity on an EEG for 24 hours. There is widespread acceptance of these criteria in the medical circles and their presence would constitute undisputed evidence of complete cessation of brain functions resulting from damage of its cells. Thus, physicians use it to declare a patient's death without hesitation. It is noteworthy to mention that there is a difference between brain death and unconsciousness. An unconscious person is a living being who lost some brain functions, but not all of them. He may still have some responses, reflexes, can breathe, etc.

The Legal Standpoint: In the U.S., many states determine the state of death when there is total cessation of heartbeat and respiration. Lately, most states have changed their laws in determining death and consider complete cessation of both heartbeat and breathing, or absence of all brain functions to constitute death. In Egypt, as well as

many other countries, death is still determined by complete cessation of heartbeat. Limiting the determination of death to just the cessation of heartbeats poses a legal problem since it does not coincide with the scientific developments.Â Withdrawing life support causing the cessation of heartbeat may be legally considered as a crime.Â Therefore, doctors ask for the alteration of the law so as to coincide with scientific developments.Â At the same time, determining death by brain death opens the door to organ transplants, since organs from a recently deceased person can be utilized.Â There is a time interval, which lapses between brain death and decomposition of cells and organs. Â

The Religious Standpoint: From the religious standpoint, death is the separation of the soul (the spirit) from the body.Â God created man from dust and gave him the breath of life.Â When the spirit returns to God, the dust also returns to dust, "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living being" (Genesis 2:7).Â Â When God breathed the breath of life into Adam, He gave him life, and Adam became a living being able to understand, feel, move, breathe, and have all the organs function.Â Death means that he returns to dust, "For dust you are and to dust you shall return" (Genesis 3:19), which means that life stops when the spirit returns to God.Â Since the spirit is invisible, it is difficult to determine when the spirit enters or leaves the body. Yet, this can be determined by the factors revealing its presence.Â Absence of the aspects of life is evidence of the separation of the spirit from the body.Â In man these aspects of life depend on brain activity. The living human body is not merely a group of organs functioning, but they must function harmoniously and in order; they are all dependent on a person's very existence.Â Actually, what makes the organs function harmoniously is the brain. Although some organs may continue to function temporarily after brain death such as the heart or some muscles, yet they do that for a short period of time and without harmony. For example, a person's head maybe severed from his body and the heart may continue to beat or muscles may move, yet the person is considered dead at the moment the head was severed and not after that.Â

Therefore, brain death is considered by some to be "physiological decapitation". Determining death by cessation of all brain functions resulting from damage of all brain cells is acceptable religiously for the following reasons: 1. Cessation of brain functions is accompanied by cessation of all aspects of life in a human, which means that the breath of life (the spirit), which God has given man, has departed and he is no longer a living being. 2. Following brain death, the continuation of some aspects of life such as muscle movement or heartbeat, is only very temporary and does not change any of the aspects of life for the human being. 3. Placing a patient on life support following brain death in order to continue the heartbeat and breathing is an artificial process, which does not have a real effect on human life.Â Instead, it places the family under emotional and financial burdens.Â Although it is different from mummification, yet the idea is similar.Â In mummification, the corpse is preserved to avoid decomposition resulting from natural death.Â The corpse maintains its outward appearance of a living being for hundreds or thousands of years, but this does not change the fact that it is a corpse of a dead person. Considering the total cessation of all brain functions as an indication of death helps in the following cases: 1. Comatose patients who are placed on life support.Â They may continue in the coma for days or weeks without any significant improvement.Â In such cases, physicians pose to the patients' families the difficult decision of withdrawing life support.Â With a clear conscious, we can say that as long as there is definite evidence of complete cessation of all brain functions, then life support should be withdrawn from the patient, whose spirit has departed from him. 2. Using brain death as criteria for death opens the door for organ transplants of those recently deceased before decomposition of the organs occurs.