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Editorial

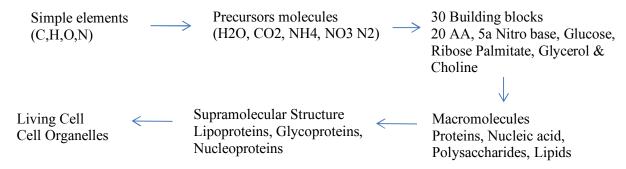
God, The Creator Versus Man, The Explorer and Manipulator

Dear faculty members Greetings,

The content of this editorial under the heading 'God, the creator versus man, the explorer and manipulator is a creation of imagination with an intension of supporting the idea of existence of a superpower, the God as the creator of every living system including mankind and man, as explorers. All the research works carrying out by man will be taken as the exploration of the secretes already created by God.

Now, let us insert as short definition of life and the death in a language of chemistry. "Life is a functionally organized state of elements and molecules. Disease and ultimately death is a state of disorder of these components. "This very definition itself supports the fact that any living body on this earth is made up of elements and molecules available on this earth. Again if we are to accept the theory of special creation already supported by three big groups; Christians Muslims, and Jews, we have to accept God, the almighty, as the creator. After repeated analysis of samples of human body, we have come to know that 6 elements i.e. carbon, hydrogen, oxygen, nitrogen, phosphorus and sulfur are the elements contributing 90% mass in the making of human body. Dust particles, God has collected from the surface of the earth for the creation of the first man as claimed by the Christians, could be a mixture of complex molecules consisting of those 6 elements along with other elements required in smaller quantities. Another information we have been getting from the books is that molecules are lifeless yet, in appropriate complexity and number, a living system comes into existance.

God, being a super-power, might be knowing all the techniques for construction of complex molecules, by organification of inorganic components through His divine power. Compromising with the findings of the analysis report of living bodies, we can imagine the possible steps of creation of life by God as outlined below.



The first set of living species including mankind, created by God, will be taken as standard, all systems being fixed correctly to their respective positions. Because of any mistake committed by mankind, if the systems are altered, the effect will be depicted in the form of diseases. Under such conditions, man, being the most intelligent living species created by God, start thinking for the exploration of the defective sites for correction. This is how man started researching of everything including human system. One major hurdle facing by man is the exploration and correction of disease processes caused by the alteration in the genetic

systems. For most of such cases, their efforts always remain at a stage yet to be completed. However, human interest for their exploration in this field is still increasing. For many of the complicated project works, ethical clearance is to be taken from the highest body. On the other hand, for some projects, seeing the importance of the work, the Government itself comes out for help.

Very recently, we came across one such project where man's manipulation skill being aimed at using for a good cause. We are taking the advantage of submitting a summary of this topic as a part of this editorial. We know this may not be a surprise for our colleagues in the department of Obs/Gynae. As mention above, simply we want to insert this as a message of human skill in manipulating God's created system for the sake of saving children in a family, already fixed for dying untimely generation after generations.

"Three- parent's in vitro fertilization, Gene replacement for the prevention of inherited mitochondrial disease." is the name of the topic.

It is a known fact that during conception, the fertilized egg has nuclear DNA from both the parents (99% DNA) with almost all the genes responsible for all the traits. However, the egg inherits the exact copy of the mitochondrial DNA (mt DNA) only from the mother. If the mother's mt DNA is defective, it can cause severe or deadly disease in the baby. If we can remove mother's faulty mt DNA and replace it by a healthy one from a donor? That's exactly what 3 –Parents IVF will be doing.

Two of the widely accepted techniques are as detailed below:

Pronuclear transfer technique: (i) Mother's egg with defective mitochondrial DNA fertilized by father's sperm (ii) From a donor's fertilized egg with healthy mitochondrial DNA, the nucleus extracted and discarded to get enucleated egg (iii) The nucleus from fertilized mother's egg extracted and transferred to the enucleated donor's egg discarding the rest with the defective mitochondrial DNA (iv) The reconstituted fertilized egg transferred to the mother's womb. Maternal spindle transfer technique (A micromanipulation technique):- (i) The nucleus or the spindle of chromosome removed from the unfertilized mother's egg with defective mitochondrial DNA and the rest discarded (ii) The nucleus of female donor's egg with healthy mitochondrial DNA also removed and discarded leaving the egg with healthy mitochondrial DNA (iii) The nucleus of the mother inserted into the enucleated donor's egg and fertilized by father's sperm (iv) The reconstituted egg transferred to the mother's womb.

Now UK is the first country to approve the procedure and the first country to approve law to allow the creation of babies from three people. The reason why we are submitting this topic for your disposal is because of the following facts. (i)The child will be inheriting the whole set of mitochondia from the 3rd parent (neither from the father nor from mother)(ii) Almost 1% of the baby's genetic material will also be inherited from the same donor (non from the parents) (iii) This set of mitochondria and mt DNA will be passing on to the next generation of the family (non from the parents) (iv) Thirteen very important proteins in the form of enzymes will be generated from that donated DNA (v) Major amount of ATP requirement of the child will be from that mitochondrial system run by those generated enzymes (vi) If the parents still want their own child without the donor, the result will be a child to be suffered his or her whole life due to the lack of sufficient ATP supply.

Now, the option is yours. One option is still left that is adoption of a genetically unrelated child. So, friends, if you come across any such condition in any of the families and if they don't want or cannot afford going for the above mention technique, kindly adopt a child who is really helpless instead of trying to get their own child. He/she will become countable assets for their rest of their lives.