

SAMPLE CONTENT



HIGH-TECH LIFELINE

Transforming Lives Through Transplants

Dr. Anil Gandhi

PREFACE

HUMAN BEINGS ARE uniquely blessed with intelligence. They have the ability to think, learn and express themselves. They become wiser with experience and they use their experiences while solving the problems they face in daily life. Humans have curiosity about their surroundings, the universe and certainly about themselves. They wonder about the structure, functions, abilities and limitations of their own body as well as the health they enjoy and the illnesses they face. Though everyone is curious about many things in life, they have some limitations in learning and they cannot know everything. One usually tries to be a master of a single subject. With the tremendous explosion of knowledge on all subjects, it is extremely difficult to keep track of even one subject. In fact, this is a time for specialization. People may learn in depth about a small part of one subject and call it 'specialization'. However, when they study more and more about their own chosen subject, specialists realize how little they truly know compared to the vast amount of knowledge that is available. In short, we remain a jack of many but not all trades and not the master of even one aspect of knowledge.

There was a time when we knew very little about our body's architecture, way of functioning, health, diseases and their treatments. With increase in various tools of learning like newspapers, periodicals, books, radios, televisions, computers and the internet, the common educated person has many opportunities for learning. However, gaps will always remain in the knowledge of a common man about any subject other than his own specialization.

As someone who has been practising medicine for more than fifty years, I have had the privilege of watching change in the

approach of the common man towards his own health problems. In the past, people were almost totally unaware of the body's structures, functions, health and diseases and they were completely dependent on and had total faith in the family physician. Over time, they started learning and medical specialties became more and more narrow. Patients began going to specialists even without consulting the family physician beforehand. Now this class of patients reads and searches on the internet about their health problems and starts displaying their knowledge about health and disease. They start cross-questioning the doctors to verify how deep in the water the doctor is. Sometimes, this kind of half knowledge can be the basis for lack of trust in the physician.

I have realized that even after fifty years in this profession, there are large gaps in my own knowledge on many subjects. I am trying to update myself to the best possible extent.

There are many diseases which have come to light recently and many new diagnostic tools have been developed along with new treatment modalities that are becoming readily available every moment. In this book, I am making a humble attempt to give glimpses of some of these to the common reader.

I have tried to stress that the body itself tries to find a remedy to the greatest extent possible. When it fails, the physicians have to use their clinical judgement, diagnostic tools and medical or surgical treatments, including the use of stem cells, cellular tissue and organ transplants.

It is aptly said, 'Health is wealth'. Good health is the conservation of one's own wealth and ill health is a source of wealth to others at your cost. The beneficiaries will be doctors, hospitals, pharmaceutical companies, equipment manufacturers and insurance companies. It is better to be healthy and wealthy rather than to make others wealthy at our cost.

The progress in science and technology has revolutionized every field of human life. There is a phenomenal contribution of

technology in healthcare as well. Continuous research is adding to improved health and an increased lease of life to mankind.

I have tried to discuss some of the advances. This will add to the health awareness of common readers but cannot in any way bypass the advice of the family physician or medical consultant.



SAMPLE CONTENT

CONTENTS

● Is Man an alien on Earth?	23
● Art of Reproduction	26
● Interfering in the duties of Gods	31
● Egg First	36
● The Ingenious Genes	39
● Cancer	47
● Cancer pain and its management	55
● “I see you” (ICU)	68
● Height and Depth of Medicine	71
● Space Medicine	74
● Telepathy or Telemedicine?.....	77
● Smart Medicines	81
● Physics in Medicine	87
● Shadow Plays.....	92
● Interventional Radiology Demystified	96
● Evolution of Surgery	121
● Scaling the Everest	127
● Idiot Savants	134
● Human Spares and Alternatives	137
● Alternative Paths	141
● Powerhouses.....	144
● Humans in the Role of God	147
● Angioplasty and Coronary Bypass Surgery	150

● Lesser known Bypass Surgeries.....	152
● Heavyweight Champs	155
● New Technologies in Orthopaedic Surgery	158
● Dental Implants	174
● Eligibility of Donor and Recipient.....	183
● Clear Vision	186
● Banking for Health.....	191
● Regenerative Medicine	196
● Human Genesis Stem Cell	200
● Bone Marrow Transplantation	204
● Hair-Raising Experience	213
● Live Chemistry.....	217
● Sweet Revenge	223
● ‘The Purifying Angels’	226
● ‘Donor and Recipient’	231
● ‘Heart to Heart Talk’.....	237
● ‘Breathing Free’.....	240
● Breathing Obstructed	244
● Face off	246
● Taming the Soldiers	249
● ‘Vision 2050’ Health Scenario	251
● Organ Donation and Transplant.....	256
● Appendix – A : Hospitals Associated	272
● Appendix – B : From Hell to Heaven with Gratitude.....	276
● Appendix – C : The Supreme Sacrifice	287
● Appendix – D : Eye Bank.....	290
● Appendix – E : Eye Donation Centres.....	292
● Appendix – F : Cornea Transplantation Centres	294
● Contributors.....	296

THE FANTASTIC MACHINE

IF YOU ASK an engineer “Which machine in the world is most near perfect, has the most precision, requires the least amount of maintenance, and works round the clock?”, the answers may vary. However, if we think about the human body as a machine, the answer would be unanimous.

No one can produce a perfect machine like the human body, however intelligent, innovative, or hardworking he may be. This machine can, however, be produced by only the natural way—reproduction. It is perfectly built, the precision is extraordinary, it works non-stop for a number of years, and very infrequently needs maintenance. Any other manmade machine of the same size and shape cannot adapt to its surroundings and cannot learn new things, nor can it be innovative on its own.

However, the human machine needs some maintenance while working. The body parts do get old and are subject to wear and tear. The body (nature) certainly tries to overcome these problems on its own up to a certain limit. Major problems result in disease, trauma, and wear and tear, and they usually need repairs and maintenance. At times, if the damage is beyond the limit of self-correction by the human body, medical aid, surgical aid or even replacements of human parts may be needed, and they are a reality with the advances in technology and medical science. Because of the advances in the health awareness of the patients and availability of better medical care (at a cost), the quality of life and life expectancy have grown profoundly and will continue to do so.



IS MAN AN ALIEN ON EARTH?

IN RECENT DECADES there has been a lot of discussion on the arrival or genesis of human beings on the earth. There is no eyewitness. The speculations are—God created the entire universe, including earth just as a magician creates things with a magic wand. Unfortunately, we do not find any concrete evidence about the existence of God. It is estimated that the human life on earth is about a hundred thousand years old. While the concept of God and religions are not more than seven to eight thousand years old. Most of the religions, however, profess that God created everything including human beings.

The scientific community feels that there was a chemical reaction resulting in a DNA by chance or by an accident. It led to the development of viruses or unicellular life forms. Life started evolving and reached multi-cellular plants, animals and lastly the intellectual human beings, over a period of millions of years. It is postulated in the theories of the evolution that human beings evolved from the apes. However, there are many missing links. It cannot be proved beyond doubt that this is how human beings evolved and came into existence.

We are a miniscule part of the galaxy called Milky Way. There are innumerable stars, planets and asteroids, gases and particles in the Milky Way. There are countless galaxies smaller or much larger than the Milky Way. We know that there is life on earth. Even if we assume the tiniest statistical chance of the existence of life on some other planet in the universe, the number of such planets would exceed several thousands. The distances of such planets from us are so vast, say lakhs or millions of light years. This is our limitation

in confirming or ruling out life on other planets. At least this is the limitation of our intelligence, technologies and resources. Let us imagine that intelligent, technologically advanced life existed on some other planet in the Milky Way or on a planet from some other galaxy. If their technologies and means of travelling were advanced enough to explore life and natural resources on other planets, then it is possible that they landed on earth just as we did on the moon. If that happened a few thousand years ago (our time), they must have found no life or primitive life on earth. If there was no life, they could bring different types of life forms from unicellular forms to plants, animals and human-like life forms. In that case we are all aliens on earth. Alternatively, they brought some life forms, which evolved on earth in millions of years or they found existing life on earth including cavemen or Stone Age human beings.

If we study the huge constructions like pyramids in our world, if we analyse the technologies available at that time, it was humanly impossible for us to construct them. Then who did it and how? This may bring us to a logical thought, that somebody else, possibly the aliens who were technologically quite advanced did it on the earth. They came to earth in their spaceship. They were perceived by us to be coming from the sky (heaven), they were seen as very powerful. The primitive humans on the earth thought of them as Gods, coming from heavens in a plane-like vehicle. They were very powerful, and could make and break anything, in short they were Gods! It was but natural to be afraid of them and worship them with great reverence. This could be the origin or the creation of the concept of God Almighty. Presently, we the residents of planet earth are trying to explore other planets to see if they are habitable for us, can we find some precious natural resources on the other planets, which we can bring on earth and use for ourselves. The aliens on other planets who were technologically very advanced could also think on similar lines and come to earth. If this was their motive, they would use their advanced technologies and try to get the manual work done from the local natives on the earth. The local

natives (cave men or Stone Age men) fearing and worshipping the Gods (the ancient aliens) would obey the orders.

We are aware about the technological advances in the field of molecular biology and genetics. We are using Assisted Reproductive Technologies (ART) for increasing the chances of childbearing for infertile couples. Let us again apply this logic to the ancient aliens (the Gods). If they were as or more advanced than what we are today, they could have also used such technologies to produce different life forms on earth, including the human beings with the help of cross-breeding techniques. In that case we are carrying at least some DNAs from them. We find paintings and sculptures showing half man and half fish, half lion, men and women with wings. Could these be the results of cross-breeding experiments by the ancient aliens, the Gods?

This leads us to the ways of natural and assisted reproduction (ART) and the technologies used in ART.

□□□

"High-Tech Lifeline has undertaken the task of communicating developments in medicine to the common man. The final chapter, 'Vision 2050' is absolutely fascinating."

Dr Raghunath Mashelkar

The 'fantastic machine' is an apt term for the wonderful creation of nature-the human body. Medicine has found solutions for insurmountable problems of deaf-mutism and blindness with bionic ear and eye. Vital organs are being replaced when they fail.

Flying in the sky and stepping onto the moon were fantasized by the human mind but detecting and repairing defects in the foetus were neither dreamed of nor fantasized. This is a reality today.

Molecular biology and genetic engineering have taken giant strides. In the near future you may give a sperm and an ovum or an embryonic stem cell along with specifications for a baby and collect your baby at a stipulated time from the research lab.

These are just a few of the topics discussed in this book.



ISBN: 978-81-930643-2-0

BUY NOW