

# The myth of laser surgery

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**L**ACK of adequate communication and explanation to patients by consultants, as well as lack of availability of education/ awareness material in the form of handouts, pamphlets, video material etc, at clinics and hospital waiting areas, have led to many a myth about modern cataract surgeries.

One such myth is that cataracts can now be removed without surgery by the use of lasers. Far from the truth, this misconception owes its existence to the frequent use of the term 'Laser' in various eye treatments. It is felt necessary here to try and clarify some concepts in this regard.

The usual cataract surgery until a few years back was to remove it through an incision (wound) about 12 mm in length called Extra Large Incision Cataract surgery (ECCE),

and implantation of an Intra Ocular Lens (IOL) in its place. The wound required about 4 to 6 stitches for its closure. These stitches needed to be removed in about 8 to 10 weeks' time, as they were made of non-absorbable synthetic material. The healing of this wound, and hence visual rehabilitation (the time taken by the patient to effectively resume full visual functions), generally took about 8 to 10 weeks. This obviously did not suit active and employed individuals and it involved greater cost and consequences in terms of time.

The most recent advancement in this regard has been that the same surgery can now be done through a 3 to 5 mm wound! This is a very small wound comparatively, and it either requires only a single or sometimes even no stitch (sutureless surgery). But there are a few things to note about this technique. One, that this is a surgery, as it involves making a small wound. Two, it involves giving some kind of anaesthesia as well. So

the preparation is the same: it is done in the operation theatre, only the surgical technique is different. This Keyhole Surgery, or Small Incision Cataract Surgery, as is generally called, is made possible by using a very high frequency ultrasound. The process is called Phaco-emulsification or Phaco Surgery.

In this procedure high frequency sound waves are used and not a laser, which is a special light and has other applications in eyes than getting the cataracts out.

What is the advantage to patient with this kind of surgery, and what must one choose between the two kinds of procedures, is the next question that naturally arises. The advantage that the patient gets is early visual rehabilitation. As the wound is small, the healing is fast. It takes about 2 to 4 weeks only as compared to 8 to 10 weeks in the conventional ECCE surgery.

An important thing to note is that the eventual visual outcome is almost identical, whether one opts for ECCE

or Phaco. In fact, one who has had a Small Incision Cataract Surgery will be visually rehabilitated sooner than the one who has had conventional surgery. The other advantages are lesser post-operative inflammation, hence a more comfortable eye, lesser medication and lesser restrictions.

Another very important thing to bear in mind is that performing Small Incision Cataract Surgery involves a high degree of skill and training on the part of surgeon. Not every surgeon is comfortable doing this procedure, and it involves additional costs too. I would be happy getting my eyes operated for cataract by a surgeon who is more skilled, experienced and comfortable doing conventional ECCE than by an unskilled or novice surgeon doing Phaco surgery, as the results in untrained hands could be disastrous, and contrary to what can be deduced from my earlier discussion. Nevertheless, in skillful and safe hands the results of Small Incision Cataract Surgery are simply miraculous. ■

# Are all diseases incurable?

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A kiln worker, because of some misunderstanding had his pregnant wife admitted to a private hospital in last month. The child is to be born. The man was charged with a bill of Rs 7,000. His wife was detained for 15 days while he ran around to borrow the money. Finally he pledged his two children to a kiln owner but only raise Rs 7,000.

The private sector is neglecting the public facilities in a substantial way though mostly for the rich and with the expense of the rich and the middle classes. There are about 600 hospitals, 30,000 clinics with 20,000 unregistered hospitals proliferate, some 250 exist in just one district, Karachi. Private medical centres also mushroom.

Chasing for profit leads to a very even within the profession. Half of the consultants in country are qualified as simple medical graduates or trainee medical officers. Of the 50 ultrasound centres in the city, 40 are run by untrained people. Clinical labs are run by non-medical technologists and maternity centres by non professionals.

Poverty and pollution are the two major factors in most diseases. Almost 50 per cent of diseases occur from polluted water or Bacteria. An allied

elements is ignorance which leads to disregard for precautions. The number of cardiac, chest TB and malaria patients has soared over the past 15 years for lack of facilities of diagnosis and treatment. No method is developed for properly maintaining and consolidating a record of all patients.

## TB:

Pakistan is one of the 15 countries where TB had been on the rise over the past 10 years. There are over two million TB patients now 75 per cent of them in their most productive years. The disease is responsible for close to 150 deaths everyday. It is almost entirely a poor man's disease and it is increasingly making a victim of children. A factor in the spread of the disease is failure of diagnosis and treatment. According to a survey some time ago, only 30 per cent of the questioned doctors rely on new specific

methods of diagnosis, like skin and blood tests and only 7.9 per cent can prescribe proper treatment.

## Cardio Vascular Disease:

This remains no. 1 killer for those above 40. More than 12 per cent population is afflicted by it. In Karachi every fourth person suffers from a cardiac disease. As many as 40,000 children are born with a heart disease in Sindh alone. There are no more than three proper cardiology centers in the country whereas the need according to experts is for at least 40 centers and 120 paediatric cardiologists.

## Diabetes:

Pakistan ranks eighth among the highest concentrations of diabetic patients. It has close to 14 million afflicted people and the number is rising.

## Hepatitis:

10 per cent of the population is said to have

suffered from hepatitis B. Some 9 per cent of pregnant women are hit by it. Contagious, every 10th person is a carrier of it. It leads to 62 per cent of liver disease. There is believed to be no cure for carriers and chronic cases though it is preventable with vaccines. The victims of its fatal variety, the so-called silent killer, hepatitis, hepatitis C, are on the rise.

## Cancer:

Some 200,000 cases of cancer are registered in 1999. The director of Nuclear Medicine, Oncology and Radiotherapy Institute says that 30,000 to 35,000 patients are on the rolls of the 10 centers in the country. At least a third of the cancer cases, it is said, can be cured, controlled or treated. A national registry programme is started with the help of WHO, but the national programme for cancer control cannot be taken up for lack of funds.

falling victim to the disease. Every fifth patient in Shaukat Khanam Cancer Hospital in Lahore is a child. And pre-cancer diseases (such as sub mucous fibrosis) are both common both in children and adults.

## Thalassaemia:

Some 200,000 children are afflicted with the disease. The number of those with major transfusion dependent anaemia increases by 4,000 new birth during the year to more than 18,000. Carriers are estimated at 6.5 million, or over 5 per cent of the population.

## HIV positives and Aids:

Known HIV positive cases number 1418 and full blown AIDS 182. The majority in both cases is of adults of between 20 and 49 years of age and male. Unreported HIV positive cases are put in the region of 60,000. The virus is believed to be spreading. Only 44 AIDS

tests.

## Kidney diseases:

There are more than 300,000 kidney patients in Karachi and its surrounding areas alone. Out of them 30 per cent are afflicted with stones, 30 per cent are diabetic and 15 per cent suffer from kidney failure. Government offers free treatment to patients including dialysis, medicines and transplant surgery.

## Mental disorder:

Every third person in the country suffers from depression or mental stress, and every third person above 45 years of age is hypertensive. Two to three times more women are victims of the disorder. A study by Karachi's community psychiatric Clinic conducted over two years on 700 patients found the majority 51.6 per cent victims of depression. Other afflictions include anxiety, 5.6% and schizophrenia 6.9%. Another study by psychiatrists had slightly different figures for depression 45%, schizophrenia 17% and anxiety neurosis 15%. Schizophrenia is believed to strike 7 to 14 per 100,000 population. 45.5% of psychiatric patients are found to belong to low income group, 42.6% to middle and 12.9% to upper. There are a total of 300 psychiatrists in the country making a ratio of 1:560,000 of the population.

The above situation shows how worsening the condition is in regard with medical and health care but the government perhaps cannot find time to cope