Gall-bladder Stone and Scarless Surgery

by Dr Humayun Kabir Chowdhury

ONE less informed about the latest advancements in the field of medical treatment may ask, "What is this laparoscopic surgery that we nowadays hear so much about?" or might go on to say, "They say there will virtually be no scar on the abdomen, how is it possible?"

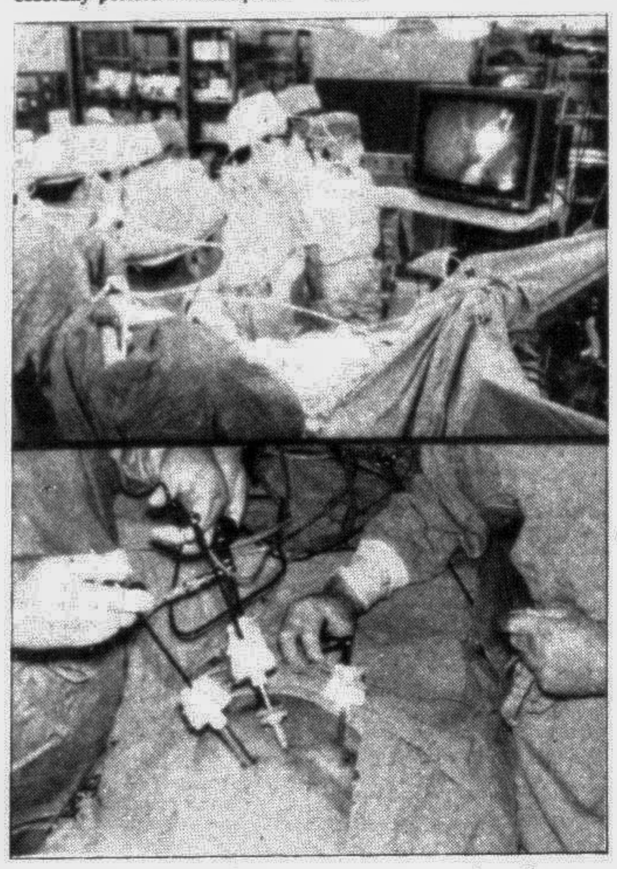
At the Diabetic Hospital, Dhaka, we are doing this treatment both on diabetic and non-diabetic patients. With the advancement of medical science, gall-bladder surgery has become much more comfortable and easy for the patients, within 48 hours a patient can come out of the hospital and start normal work within five - seven days. In America, in the year 1991, 6 lakh gall-bladders were removed and out of them four lakh were done with the aide of this advanced technique.

There are few organs in the human body which produce stone. Some start hurting immediately, others remain silently and some cause devastating effects. Kidney, urinary-bladder, pancreas, gall-bladder and bile duct are these organs.

This is not a new medical phenomenon. Scientists have found evidence of gall-stone in a mummy of a priestess of Amun from the 21st Egyptian dynasty (1085-945 BC). After that Chilean mummies from 2nd and 3rd centuries AD showed the presence of gall-stone. And now, probably every family has a member or relation with gall-stone, and two-thirds of these are treated by laparoscopic method. In Austria only 24 hospitals followed this procedure in 1990 and in 1991, 38 hospitals started doing laparoscopic surgery. One renowned surgeon from England named Cuschieri recently said, "There have been few instances in the history of surgical practice, where the benefits of a procedure became so clearly manifest within such a short period of time."

Gall-bladder is a special kind of store-house of bile, which is produced by the liver. Bile helps in digesting fatty food. In absence of gall bladder this storing function is taken up by the bile duct. So gall- bladder is not essential for the function of human body. Medical science has decided that if a gall bladder produces stone then it should be removed from the body with the stone. Any way, there are situations when we decide not to do the operation for the greater benefit of the patient.

A surgeon from Berlin named Langenbuch first successfully performed the operation to remove gall-bladder in 1882. Since then it has become a common operation. But medical scientists always tried to find out other methods like dissolving the stone with medication, using extra-corporeal shock wave, lithotripsy by which stones are broken from outside, but none of the methods could stand the test of time. So cholecystectomy or removing the gall-bladder remained the choice of treatment. Now surgeons started working on how to make this procedure more painless, comfortable and scarless. Success came in 1987 when Monret in France performed first laparoscopic cholecystectomy and the whole world accepted this procedure in no time.



Laparoscopy is a German word, derived from Lapara, meaning flank or loin, but generally referring to the abdomen. So the word laparoscopy means examination of the abdomen, but surgeons use this term when interior of the abdomen is examined with a special telescope introducing it through a small hole about 1 cm in length. Inside of the abdomen is inflated with gas and interior is examined.

With the quest of development and providing more comfort to the patient, surgeons are now removing the gall-bladder with stones through this 1 cm hole in the umbilicus (naval). Any way, three other 1/2 cm incisions have to be made and instruments are passed inside the abdomen. A camera is attached to the telescope and inside of the abdomen is shown in a television set. The whole procedure is done by looking at the TV performing all the necessary steps to dissect the gall-bladder. At the end of the operation minute holes are closed with the help of cosmetic stitches and patient does not get any remarkable scar on the abdomen.

The most important aspect of this modern space-age high-tech surgery is, patients can be allowed to go home after 24 hours of the operation and start their normal work within a week. Immediately after operation, patients remain comparatively more comfortable with minimum need for any pain-killing drug.

With all these advantages, more and more patients are now coming forward for surgery, now that surgeons know how to perform surgery through small holes looking at the monitor and seeing magnified image of the internal parts of the body. Surgeons are now using this technique or at least trying to use similar procedures for treating other diseases like appendectomy, hernia operation etc. Science is progressing each day and we are happy that at least in this respect, we are not lagging far behind the rest of the world. Since April 1993, surgeons at the Diabetic Hospital (which also treats non-diabetic patients) undertook this new procedure in removing gall-bladder stone very successfully and thus helped the patients go through the once-feared surgery with virtually no pain at all.

The writter is a consultant surgeon of Diabetic Hospital, Dhaka

Why Grandma Shaba has Her Hands Full

by Green Siyani

A community project started in Malawi and spreading throughout the country aims to care for the dying and to educate and support the living. Its goal is to create an Aids-free generation within 15 to 20 years. Gemini News Service reports on the help it is giving to one grandmother who finds herself suddenly having to look after nine children.

GRANDMOTHER SHABA
'One moment I had no worry in the world, the next nine children in my lap

WHEN Maritas Shaba celebrated her 63rd birthday in 1991, she expected the rest of her life would be plain sailing.She was wrong.

Two years later, Shaba is probably the busiest grandmother in the Ekwendini area of northern Malawi. Soon after her birthday two years ago, her son-in-law, Langon Ngaoma, died. He was the father of nine children from three to 18 years old. Seven weeks later his wife, Maurice Kaunda, followed her husband to the grave.

Both died of Aids-acquired immune deficiency syndrome — and their deaths inevitably shifted the responsibility of raising their nine children to the grandmother. Her total property consists of a thatched house, a few pots, some plastic plates, several chickens and five mango trees in a field behind the house.

She said: "One moment I had no worries in the world, and the next, nine children landed in my lap. Can you begin to imagine what that experience must feel like?

"Here I was, a poor old woman in a drought year being requested to take care of nine children. Where was I going to get the means to support them?"

Shaba, a smile perpetually on her face, has risen to the challenge. Part of her strength lies in an ambitious community-based effort known as the Ekwendeni Aids Control Project, initiated by the Ekwendini Presbyterian Church. Religious and health authorities throughout Malawi have begun similar projects.

The project aims to care for the dying and to educate and support the living. Its ultimate goal is to create an Aids-free generation within 15 to 20 years. Project staff members teach people how to avoid risky behaviour and point out the the need to be compassionate to those with Aids.

They also train community and hospital workers to care for Aids patients. The project was begun as a result of frightening statistics recorded at Ekwendeni Hospital, which serves 46,000 people in a rapidly growing educational, religious and shopping community.

Howard Kasiya, project coordinator and the hospital's clinical officer, says: "In almost all these weekly tests, 25 of these patients are found to be HIV positive."

In 1989 this sobering information forced action on the 205-bed hospital. People in the community began to complain that they were ill-equipped to care for Aids patients. The goal since the project began has been to make it possible for patients to remain in their own homes.

One such patients is Gelusi Nkhambule. She looks at a visitor with sunken eyes and tries to smile. It is hard. "It's a terrible thing to wait for," she says, tears lingering in her eyes. "I know I have Aids. I am not able to say how I got it, but here I am, dying. What more is there to say?"

When she dies, Nkhambule will leave behind her seven-year-old daughter, Khwima Nyasulu. Khwima's name means "be brave, the world is cruel."

Nkhambule lives in a tiny house with her mother. Inside are three rickety wooden chairs. Outside is a mat full of drying mushrooms that will be dinner for tonight. Large blue-black flies, attracted by a nearby unprotected toilet, are having a field day with this local delicacy.

Ekwendeni Hospital's efforts to improve conditions for patients like Nkhambule are attracting support from local non-governmental organisations and international agencies such as the United Nations' Children's Fund (UNICEF). Since 1989 UNICEF has provided about $40,000 to support the project. It also provided $20,000 for an assessment of the needs of all orphans.

Hospital staff counsel patients before and after the HIV test. They also help patients reach decisions about what they want to do with the rest of their lives, socially, economically, religiously and otherwise. To assist in home-based patient care, staff members give out kits of gloves, soap, sheets and other items, provided by Dan Church Aid of Denmark.

Jane fetches water from a hole near the river. She is one of the children helped by the Ekwendeni AIDS Control Project

Another important component of the project is community Aids education. To make sure the community has accurate information about Aids, hospital staff talk to women at pre-natal clinics, and trained community leaders speak at regular meetings. Volunteers teach families about Aids and the hospital organises follow-up visits. Aids-free Generation clubs also help spread the word. These youth groups discuss Aids and write songs, poems and plays on the subject with the help of Health Ministry staff. Once month they present their work to the community.

Orphan support activities aim to serve children orphaned by any cause, not just Aids. The project assesses the children's needs, the chief ones being food, clothing and school fees, and provides fertiliser to start them on the way to economic self-reliance through farming.

For Shaba and her nine grandchildren, self-reliance may bot be a long way off. This year the family had a good maize crop.When the project assistance ends sometime in 1994, the eldest child, 19-year-old Linda, will be finishing secondary school. If she passes her final examinations, she hopes to train as a nurse.

But the last-born, three-year-old Mopopa — whose name means "one born after everyone is dead" — must continue to rely on organisations like Unicef for a long time yet. Shaba's granddaughter may also need help from both Unicef and the community to survive the trauma that will inevitably result from her mother's death. She is just one of thousands of such children in Malawi and throughout the world.

— Gemini News

An End to Leprosy?

The world's long war against leprosy may be nearing its end. Judith Perera of Inter press Service reports.

THE world may yet rid itself of a disease which, though not fatal, remains dreaded across the world because it often disfigures its victims.

According to doctors at the Geneva-based World Health Organisation (WHO), leprosy could be eliminated as a public health problem worldwide by the end of the century.

"The required technologies and strategies for leprosy control exist and so, it appears, does the political will to tackle the issue," says. Dr Shaik K. Noordeen, WHO leprosy unit chief. "We now have an opportunity to solve a major public health problem that cannot be missed."

There are an estimated 3.1 million leprosy cases worldwide today, with the disease striking at least 600,000 new victims every year.

Health experts say leprosy is endemic in 87 countries, the worst affected region being Asia. India alone accounts for 64 per cent of all registered cases with Indonesia and Burma having a further six per cent.

The other badly affected countries are Nigeria and Brazil, which between them account for about 11 per cent of the cases across the globe.

Leprosy is prevalent in the Middle East but the true incidence of cases is not known. "Reporting is difficult in that region where, in general terms, leprosy has an especially negative image," says Noordeen.

Based on available records, the disease appears highly endemic in Egypt where there are 30,000 registered cases in Iran which has 30,000 cases; Sudan with 32,000 cases and Pakistan 10,000. Somalia is also badly affected, but the situation there is complicated by famine and political upheaval.

In the Gulf, Oman is the only state reporting endemic cases, which total a few hundred. In the other Gulf states, reported cases are attributed to immigrants and foreigners. But, according to Noordeen, not all cases are identified or treated in the region.

Leprosy is caused by a bacteria called mycobacterium leprae, which is related to the micro-organism causing tuberculosis and is still something of a mystery to the medical profession. It proliferates slowly at low temperatures and tends to prefer the skin or peripheral nerves.

Its mode of transmission is not fully understood but is believed to enter the body through the lungs or through cuts and wounds. The disfigurement characteristic of leprosy is usually the result of secondary injuries which are neglected because of the lack of sensation due to nerve damage.

One of the main problems in developing successful treatment for leprosy is that it cannot be cultured in laboratories for proper study. It can be bred only in armadillos (small animals with large, bony scales) which have a suitable body temperature. This has also hampered the development of a vaccine.

The entire population of armadillos worldwide would only be sufficient to breed enough bacteria to prepare vaccine for a city the size of Bombay, researchers say.

The disease takes two forms. In the severe form — multibacillary or lepromatous leprosy — a large number of organisms are involved and the immune response to them is very low." The less serious paucibacillary or tuberculoid leprosy involves fewer organisms that provoke a strong immune response.

To eliminate the problem in the next six years, Noordeen says US$420 million, including US$140 million for drugs, will be needed to diagnose and cure six million people.

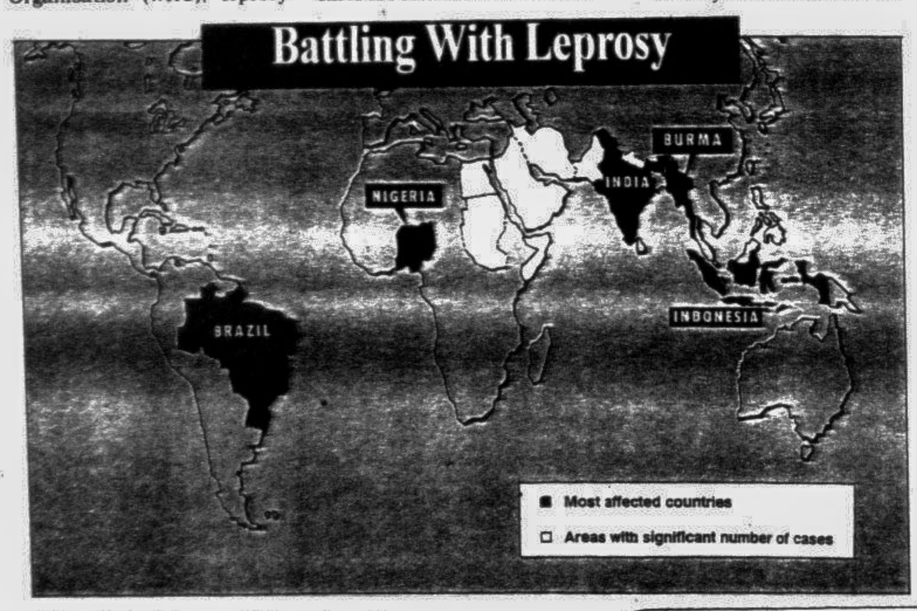
The key to success is multi-drug therapy (MDT), which was introduced more than 10 years ago when the standard treatment based on the product, dapsone, became ineffective due to drug resistance.

Since the introduction of MDT in 1981, leprosy has been reduced by 75 per cent. It is a fairly complex regime involving three drugs — dapsone, rifampicin (an antibiotic) and clofazimine (a bacteriostat). These are administered for two years for the more severe form of leprosy.

Patients receive daily doses of clofazimine (50mg) and dapsone (100mg) as well as larger monthly doses of rifampicin (600mg) and clofazimine (300mg).

The average cost of MDT is about US$15 per patient. For successful elimination of the disease, Noordeen says it will be necessary to ensure that at least 85 per cent of all cases receive MDT up to the year 2000.

He adds, "Coverage at present stands at around 50 per cent which is too low to break transmission. We must redouble our efforts."



TB Comes Back with a Vengeance

by Dr Sanjiva Wijesinha

MOST infections diseases such as measles, chickenpox and mumps are characterised by the good news that once you recover you cannot get the disease again. This is because soon after these germs enter the human body defence mechanisms go into action to rid it of them and render it immune to future invasions.

Not everybody who gets a does of infecting organisms suffers the typical symptoms of the disease. Quite a few of us, thanks to having a well developed immune system and receiving only a small dose of the infecting germs, do not even feel ill at the time we are acquiring lifelong immunity from these diseases.

This is why not everybody exposed to an infection comes down with the disease. It also explains how some infections affect some people badly while conferring immunity on the rest. What we call disease is, after all, the result of a face-off between the infecting organisms and the body's immune mechanisms in which the invaders get the upper hand.

The infection called tuberculosis, or TB, has always been a different entity. Any individual infected by the TB bacillus is destined to harbour this germ within their body for the rest of their life.

A small percentage become clinically ill, manifesting the typical signs of the disease such as enlarged glands, meningitis, damaged lungs, bones, joints etc. — but most of those infected show no evidence of illness, thanks to their efficient immune systems.

These people are described as having subclinical infection, and the bacillus can lurk dormant in their lymph glands and lungs without causing any trouble — unless something should happen later on in life such as malnutrition or a defect of immunity. In such a situation the bacilli could overcome the body's resistance and clinically obvious TB can develop.

Control of TB has thus depended on identifying those infected persons with active cases of the disease (to cure them and prevent them from transmitting the germ to others) as well as identifying those with subclinical infection (to prevent them from developing active disease).

Since the discovery in the mid-1950s of antibiotic drugs that act against the TB bacillus, the number of cases reported annually in the United States started gradually declining. For more than 30 years statistics from the National Centres for Disease Control (CDC) in Atlanta showed an average annual fall in new cases of TB in the US of six per cent.

In 1985 the situation dramatically changed. From that time the number of TB cases diagnosed annually has risen by 16 per cent a year. From having been eliminated as a serious health hazard in the US, TB has now re-emerged as a major threat to public health.

This situation is not confined to the US. In Britain, where the incidence of TB was falling in the 1980s, the last few years have seen a steady increase in the number of patients diagnosed. In parts of sub-Saharan Africa, where TB was beginning to respond to control programmes, health workers these days are seeing a resurgence.

In the US several factors have led to the reactivation of TB, a disease the world had assumed was being tamed. These include more poverty and homelessness, increased drug abuse, greater overcrowding in inner city areas and immigration from countries with a high prevalence of TB.

"However," says Dr. Dixie Snyder of Atlanta's Centres for Disease Control, "the most profound effect has been the epidemic of HIV infection".

The basic reason for this is that resistance to TB is mediated by T-lymphocytes, a type of white blood cell destroyed by the AIDS virus.

So not only is a person harbouring the TB bacillus more likely to develop active TB if he gets HIV infection; those people who become infected with the AIDS virus (and so lose their T-lymphocytes with which to mount an immune response) are more likely to catch TB if exposed to people carrying the germ.

With their immune systems out of action, they will almost certainly develop a rapidly progressive illness rather than subclinical infection.

For several reasons doctors find it difficult to make an early diagnosis of TB in AIDS patients — resulting in increased transmission of infection to others and death striking rapidly.

Treating TB patients is not easy because the drugs have to be taken regularly for long periods to be effective. Failure to comply with therapy can lead not only to a patient failing to be cured, but also to the development of bacilli resistant to the usual drugs. Already, two large outbreaks of drug-resistant TB have occurred in Florida and New York.

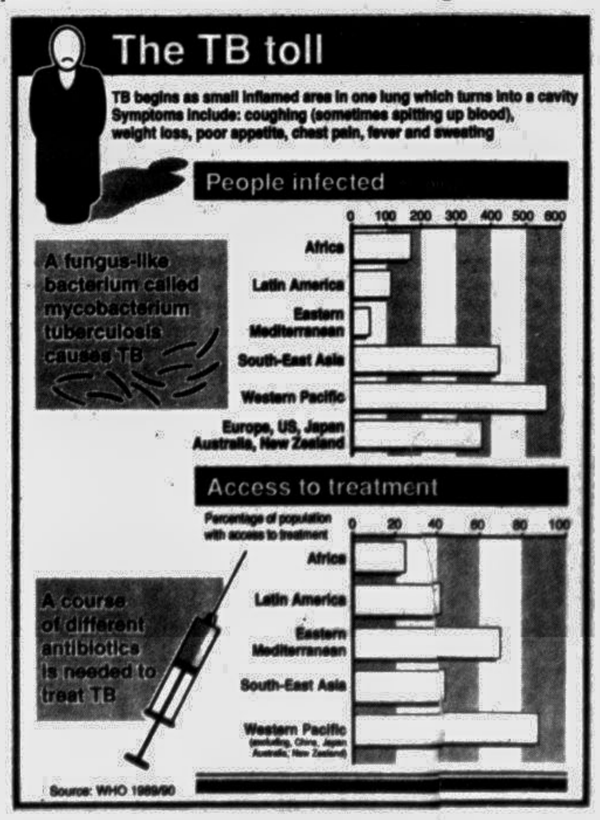
In New York, which in 1992 saw 3,700 new cases of TB, there are fears that people with TB will transmit the infection to the rest of the population.

Patients are being closely supervised and in some cases even isolated to ensure that their treatment is properly carried out under the supervision of health workers.

In the last two decades TB has been seen as a typical Third World disease, associated with poverty, overcrowding and malnutrition.

Now, in the more affluent parts of the world, it is not merely the few afflicted with poverty who fall victim to TB. The social changes wrought by affluence — such as intravenous drug abuse and changed sexual mores —have taken their toll on the population's state of immunity.

The Third World has learned to live with TB. In countries like the US, the re-emergence of TB seems to have caught the public health system off guard. A national TB Task Force has been set up and aggressive efforts are being made to control the epidemic and prevent the increase of drug-resistant TB.



Running Related Injuries and its Management

by Dr Mohd Ali Belal

RUNNING is not for all, certain persons who have cardiac, respiratory and musculoskaletal or like problems are advised other physical activities such as swimming, walking, cycling etc. Some injuries are very much serious some are very minor. New runners develop injuries when they run too much, too soon or run on irregular hard surfaces with inappropriate footwear. To avoid injuries runner needs proper training.

Types of runners:

- Joggers who runs 3 to 20 miles a week at rate of 9-12 minutes per mile.
- Sports runner who runs 20-40 miles a week.
- Long distance runner who runs 40-70 miles a week at a pace of 7-8 minutes per mile.
- A marathoner who runs 70-200 miles a week with a pause of 5-7 minutes per mile.

Types of injuries:

Heat injuries, heat cramps, heat exhaustion, heat stroke, muscle soreness, muscular strain, sprain etc. are minor injuries and stress fractures and pelvic disorders are the major injuries.

Causes of injury:

- Training errors
- Bio-mechanical abnormalities
- Inappropriate heel strike
- Improper rotation of the joints during running
- Improper extension and flexion of the joints.
- Inappropriate pelvic motion.
- Bad posture and gait.
- Inappropriate shoes.

Sites of injury:

- Knee as most dependent joint.
- Lower leg and foot injuries.
- Hip, buttock and back pain

Therapeutic Management and Preventive Measures:

- Rest to the affected part.
- Application of ice to the affected part later with moist heat for 15-20 minutes followed by gentle stretching exercises. If the symptoms persists he/she should consult a physician
- Anti-inflammatory medications, aspirin etc may alleviate symptoms.
- Intra-articular injection of steroids into the area of maximum painful part improves early symptoms.
- Surgery is rarely performed for injuries caused by running except in absolute indication.
- In case of heat injuries evaporation of sweat becomes the principal means of dissipating heat.
- In heat crams due to prolong sweating, rest and replacement of water and electrolytes is the treatment.
- In heat exhaustion which is more severe than heat cramps needs stop to further running, elevation of feet and cool your body with ice or cold-wet towels. In severe cases intravenous fluid normal saline or dextrose in normal saline may be used, on the basis of patients clinical condition, blood pressure, electrolyte status and urinary output.
- Heat stroke cases must be hospitalise immediately.

Preventive Measures:

It includes a routine training, a good running surface avoiding irregular surfaces, more warm-up exercises before running, appropriate running shoes, stretching and strengthening slowly and gently of the joints prevents many injuries. Orthotic, devices also prevents biomechanical imbalances that cause running injury.