

LIVING DONOR LIVER TRANSPLANTATION

# A second chance at life from liver failure

STAR HEALTH REPORT

If medical treatment/therapy has been proven unsuccessful and the liver is no longer able to function, liver transplantation remains the only option for patients suffering from liver failure.

Liver transplantation is a surgical procedure whereby a diseased or failing liver is removed and replaced by a whole new liver from a deceased donor (cadaveric) or part of a healthy liver from a living donor.

**Living Donor Liver Transplantation (LDLT)**

In LDLT, the diseased liver is removed and replaced with a part of the liver from a healthy donor.

ACLDT's Respiratory Physician Dr Lee Kang Hoe, who specialises in critical care manage-

ment of all acute liver failure, says that the main advantage of LDLT is the timeliness because it decreases the risk of complications and death while waiting for match from deceased donors. It allows scheduling of the transplant surgery such that the patient with decompensated liver function can be optimised prior to surgery.

In addition, LDLT can be performed on living unrelated (or emotionally related) recipients and donors at ACLDT. This is unique as Singapore is one of the few countries within Asia that can do so. The other important advantage is that the quality of the graft is better as it is retrieved from a healthy donor.

**The transplant journey**  
At ACLDT, they adopt a multi-disciplinary approach to the clinical treatment and management of patients' medical

conditions.

The recipient and the donor are operated on simultaneously by two transplant teams including surgeons, anaesthetists, nurses and technicians in two separate operating theatres.

The surgeon working on the donor removes a portion of the liver — between 40 to 60 per cent of it — depending on whether the recipient is an adult or child.

The grafted liver is then transplanted into the recipient as soon as possible to ensure that it will function well after it has been transplanted.

The other surgeon operating on the recipient will first remove the diseased liver, leaving the major blood vessels clamped and in place. When the grafted liver is available, he will place it into the abdominal cavity and then proceed to connect it with the major blood vessels. Once

this is done, the radiologist will do an ultrasound scan to ensure that there is blood flow in the new liver.

The liver has an amazing ability to regenerate. Hence, the donor's liver will regenerate back to its full size within a few weeks of the surgery without affecting its normal functioning. The transplanted liver will also grow until it is the appropriate size for the recipient's body.

The outcome for liver transplant surgery has improved dramatically over the past two decades. Most liver donors are able to return to a normal quality of life within three months and, the recipients within six months.

**Special liver ward at Gleneagles Hospital**

To provide the best possible care and treatment for liver transplant patients, Gleneagles Hospital has a dedicated ward,

especially for the care of patients suffering from liver diseases including those undergoing liver transplantation.

Complementing ACLDT's highly successful LDLT Programme is the Parkway Asian Liver Ward, which comprises seven Liver Intensive Care Units (ICU) and ten patient rooms. It is an integrated facility that is co-managed by ACLDT and Gleneagles Hospital, with advanced medical equipment, including the various types of liver dialysis machines and monitoring devices, to ensure that every patient receives the best treatment for his/her liver condition.

Liver dialysis serves as a bridge for critically ill patients with liver failure until their transplant surgery can be performed.

LIFESTYLE



Running barefoot or wearing shoes?

For the past few years, proponents of barefoot running have argued that modern athletic shoes compromise natural running. But now a first-of-its-kind study suggests that, in the right circumstances, running shoes make running physiologically easier than going barefoot.

The study, conducted by researchers at the University of Colorado in Boulder published online in the journal *Medicine & Science in Sports & Exercise* was designed to determine whether wearing shoes was metabolically more costly than going unshod. In other words, does wearing shoes require more energy than going barefoot?

Researchers found that barefoot running, often touted by fans as more natural than wearing shoes, was actually less efficient. When barefoot runners and shod runners carried the same weight on their feet, barefoot running used almost 4 percent more energy during every step than running in shoes.

If you are barefoot, the job of absorbing some of the forces generated by the collision of foot and ground shifts to your leg muscles, a process called the cushioning effect. As a result, the leg muscles contract and work more and require additional energy. The metabolic cost of the activity rises.

It is important to note that the study looked only at the metabolic efficiency of wearing shoes, compared with going barefoot. The scientists did not evaluate the common claim that barefoot running lowers injury risk.

In the end, lightweight models, though, that provide cushioning to spare leg muscles without mass to slow movement may be the physiologically smartest alternative to being bare.

Source: The New York Times

**HEALTH** bulletin

**Call for hairdressers to get skin cancer training**

Hairdressers can be trained to check their clients for skin cancer including deadly malignant melanoma, say health experts.

In women, the cancers occur most commonly on the legs. For men, it is the back. But up to a fifth affect the skin of the head and neck. Lesions on the scalp and the back of the neck can easily go unnoticed, and experts say hairdressers are the ideal people to spot these. Removing suspicious moles early can prevent a deadly invasive melanoma developing.

People at greatest risk are those with fair, freckled skin and lots of moles. Signs to be aware of include changes to moles, such as itching, bleeding or changing shape or colour.

Source: BBC

**Daily sugary drinks raise heart disease risk in males**

Beverages with sugar added raise a man's risk of developing heart disease by 20 percent if he drinks one per day, while their equivalent diet drinks seem not to, researchers from Harvard School of Public Health reported in the journal *Circulation*.



## Multi-approach needed to make vaccine accessible to all

DR MD RAJIB HOSSAIN

Vaccine is considered as one of the most efficacious, cost-effective and beneficial tools for saving millions of lives in the world. Although poor nations will get the maximum benefit of the vaccine, many lifesaving vaccines are inaccessible to millions of children in developing countries like Bangladesh.

Star Health talked to Professor Robert Booy, Head of the Clinical Research team at the National Centre for Immunisation Research and Surveillance (NCIRS), Australia who has wealth of experience in vaccine research, immunisation and infectious diseases to share his ideas to make vaccine accessible to all. The summary of the conversation with Prof Booy is projected below:

**What are the current and future challenges of vaccine?**  
There are millions of people who cannot access the vaccine simply because they cannot afford it. Many life-saving vaccines are still out of reach of common people in most developing nations. There are high cost and technology involved in vaccine production that allows few companies to produce vaccine in



developed part of the world. There is also the complexity of storage and delivery system that leads to poor coverage.

**How can we reduce the cost and increase accessibility of vaccine in developing countries including Bangladesh?**  
Multiple approaches should be taken to trim down the cost and make vaccine accessible for mass population. Approaches to provide fund should be placed to multiple donors including governments, GAVI (Global Alliance for Vaccines and Immunisation), The Bill & Melinda Gates Foundation, World Health Organisation (WHO), international NGOs, development agencies and also local donors.

There should be two different pricing system-for developed and developing counties where developing one will get it at reduced

price. There is also need to innovate or improve the ways we deliver vaccine. If we could innovate the easy to use method like micro-needle skin patches, spray that would reduce the need of skilled manpower, reduce storage hazards and fewer side effects.

Again, transfer of technology for vaccine production in developing countries with emerging economy would lead to production of vaccine at relatively lower price.

**There is a laps of around 15-20 years before vaccines are available to poor countries. How can we close the gap?**  
A new financial mechanism called the Advance Market Commitment (AMC) provides important tool to enable poor countries to get new vaccine in more timely fashion. Through the AMC mechanism, the manufacturers make binding commitment to make vaccine available in sufficient quantities as demanded by countries and to sell those amounts at a relatively lower price. Supply and demand are thus brought into better balance sooner that closes the lag.

E-mail: rajib.hossain@thedailystar.net

## PET-CT imaging available in the city

STAR HEALTH REPORT

With the support of GE Healthcare, United Hospital, Dhaka and Medinova Medical Services recently introduced PET/CT imaging, an advance tool for diagnosis of cancer at a very early stage, says a press release.



Representatives of the organisations are seen speaking at a press conference held at a local hotel in the city revealing its use including early diagnosis, help monitor the efficacy of cancer treatment or therapy and other applications in cardiac and neurology field.

# Instant FiberLife

Instant fiber drink for healthy life



Natural Fiber + Vitamin C + Beta Carotene

## 3 in 1

- 100% refined natural fiber
- Antioxidant enriched fiber drink powder
- Orange flavored

- Sugar free
- Preservative free

**ORION**  
Natural Care Ltd.  
Dhaka, Bangladesh  
*... caring naturally*