

Cochlear implant surgery goes on hand in the country

MD RAJIB HOSSAIN

Nine-year-old Abdullah had never heard her mother's voice, nor had the sense of any sound. He had been suffering from profound hearing loss, a mutilation her parents discovered at his first birthday, when their baby was non reactive to any clatter.

But unlike most families in Bangladesh, who are willing to adopt their child with disability, Abdullah's mother brought him to ENT specialists. They suggested a strong hearing aid but it proved to be ineffective after 2 years.

"I was quiet upset but never had given up hope. We sought overseas healthcare but nothing could refurbish his hearing. Finally our dream turned into reality when we consulted with Professor Dr Mohammad Abdullah who assured us to restore his hearing by cochlear implant. We knew a bit about cochlear implant in some foreign hospitals but never thought

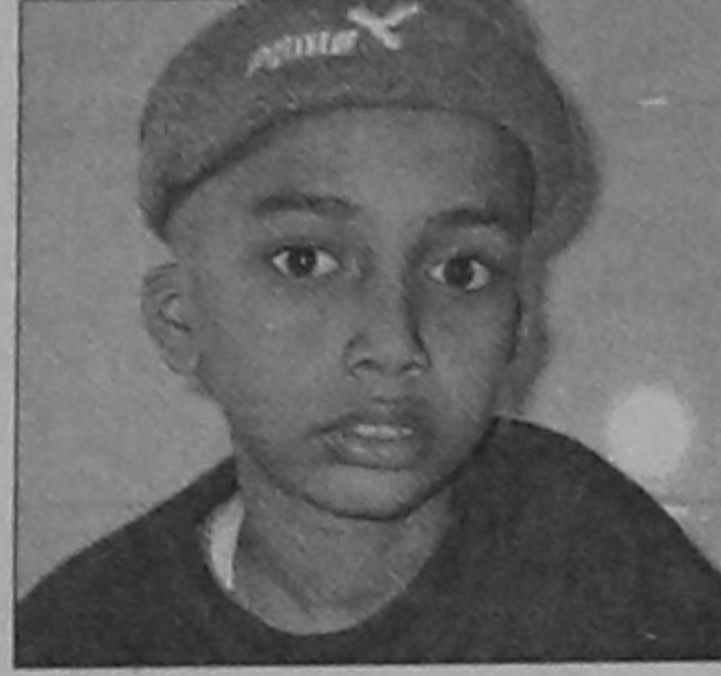
about performing it here in our country," said Abdullah's mother. Abdullah's parents, who live in Sylhet brought him to ENT Department of Mitford Hospital where he underwent cochlear implant surgery recently.

Department of Otolaryngology and Head-Neck Surgery (ENT) of Sir Salimullah Medical College and Mitford Hospital has started cochlear implant surgery at regular basis. Last week the department successfully performed four cochlear implant surgeries.

This was the second initiative and at the largest scale in the country so far. The department has taken steps forward for this revolutionary work of its kind first ever at a public hospital in the country at regular basis.

Cochlear implant is an electronic hearing device, designed to produce useful hearing sensations to a person with severe to profound deafness.

It is surgically implanted in the



Abdullah, the profoundly deaf patient who recently underwent a cochlear implant surgery at Mitford Hospital.

inner ear and activated by a device worn outside the ear. Unlike a hearing aid, it does not make sound louder or clearer. Instead, the device bypasses non functioning parts of the hearing system and directly stimulates the nerve of hearing, allowing deaf individuals to receive sound.

Statistics reveal that 3 million

people in Bangladesh are suffering from variable degree of deafness. One out of every 1000 newborn children suffer from severe hearing impairment those could be helped with cochlear implants. Because of the high price of the device, very few patients of our country can afford it.

One child may be born deaf or one may become deaf suddenly. Experts identified genetic factor (that is transmitted mainly through marriage between consanguineous relatives), measles, mumps, rubella virus attack during pregnancy, taking some ototoxic drugs like Gentamycin, Frusamide are the culprits that damage the sound sensitive cochlea of a baby. Specialists advise to avoid the attacks from mentioned culprits to keep our hearing intact.

Expert views

Professor Dr Mohammad Abdullah is the pioneer of cochlear implant surgery in

Bangladesh. He is the Head of the Department of Otolaryngology and Head-Neck Surgery of Sir Salimullah Medical College and Mitford Hospital and also the principal of that institute. In an interview with Star Health he shaded the light of different aspects of cochlear implant surgery in the country.

"Cochlear implant surgery can make a big difference to millions of our deaf people, specially children's life. People suffering from severe to profound deafness really need the surgery. Very few of them could afford going abroad for this costly surgery. As an endeavour to make it accessible locally we started the surgery at this (Mitford) hospital on December 2006," said Professor Dr Md Abdullah.

hearing and those who is congenitally deaf also becomes dumb. So children aged 2-5 years are the suitable candidates of the surgery and after that they can lead a normal life like any other children. I see people are becoming aware and sensitive regarding this matter. I see it as an achievement in fact. But more support and attention are needed to implement it throughout the country" he added.

Experts urged all sections to come forward to make it available to the doorstep of poor community. Allocation of adequate government budget and other supports are crucial in this regard. Extended services from NGOs and other humanitarian organisations are also important to make it reachable. They recommend support from banks who can give loan to the patients without interest. Experts urge to stand for the noble intervention, so more children like Abdullah get the gift of hearing.



SPREAD OF BIRD FLU

Address traditional practice to reduce harm

DR RIFFAT H LUCY

Due to ignorance, bird flu created many problems in the country, mostly in rural areas. As known among about 244 species of migratory birds, approximately 21 species may carry the HPAI/H5N1 virus.

Bangladesh has banned the import of poultry from 25 bird flu hit countries, including India, as a precaution with crack down on smuggling of birds. Safety appliances including masks, gloves and bleaching powder were distributed, bird selling centers were trained to promote health and hygiene improvement. But the situation was becoming worse as some regular practices were missed.

We are overlooking the practice and behavior which we are still practicing in everyday life in our country which is a major challenge. There should be a persistent campaign on bird flu prevention and management as there is hardly a family in rural Bangladesh that did not raise a dozen or so chickens in their backyard. It is sad that bird flu has reached to those backyard farms. It is well realised that we cannot prevent the further spread of bird flu unless we inform, motivate and mobilise the farmers to take measures to prevent the disease. We should address the traditional practices and behaviors which facilitate the spread of bird flu.

1. In the country, chickens are traditionally bought live from the market and slaughtered at home.
2. After the bird's throat is slit, it thrashes about and its blood sprinkles all over the courtyard. Usually the blood is not washed away, nor are the remains of the bird properly disposed of. Instead, the bird is thrown away where wild birds may eat it.
3. Home-grown chickens generally roam about the courtyard and defecate. People do not mind about the excreta of the

domestic animals.

4. The residents usually move all over on their bare feet carrying the faeces into their homes, bedrooms and other places.

5. Chicken coops are generally cleaned each morning, but the cleaners rarely cover their faces with a mask or a piece of cloth to prevent exposure to faecal dust.

6. Amongst the very poorest people, residents and animals, including chickens, often share the same house and chicken faeces are either dumped in the backyard or spread over the kitchen garden as manure.

7. Some other households dry the faeces in the sun and then put them into the pond as fish feed—the same ponds they use for bathing, clothes' washing and watering livestock. Chicken faeces are more harmful than human faeces.

8. Traditional health and routine hygiene practices also need to be changed. People have less attitude of washing, cleaning and maintaining personal hygiene. If we can do that, we will be able to put an end not only to bird flu, but also to a host of other diseases that we suffer from.

Some recommendations can be forwarded:

1. People should be discouraged to move bare footed inside and outside the home
2. Chicken should be discouraged to slaughtered at home
3. We must dispose of chicken faeces the same way as we dispose of human faeces. We must put them in concealed pits the way we do human faeces.
4. Chicken faeces should not be used in garden and as fish food in ponds
5. We must develop a practice to wash our hands several times a day
6. There should be a persistent campaign on bird flu prevention and management

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Potential benefits of glyconutrient supplement in human body

DR N M KIRON

Glyconutrient supplements are using in the first world for the better improvement of complicated diseases. It is a new technology in medical science. This subject is coming out with some miracle in different disciplines of medical science.

Introduction of glyconutrient proactive energetic supplements

Eminent Scientist in the field of glycobiology have proposed that specific dietary sugars (Glyconutrient) could represent a new class of nutrients with interesting benefits to health.

Glyco means "sweet" and refers to monosaccharide or sugars. The role of carbohydrates (sugars) in energy production has been long understood. However, there are additional crucial role into orchestrating the healthy structure.

About 200 monosaccharides occur naturally in plants. Fewer than 10 are predominantly used by the body for healthy function. Glucose found in table sugar is only one of them. There are many others like glucose.

Glycoproteins are molecules that are combinations of sugar

and protein. Glycolipids are combinations of sugar and fat (lipid). The general term for these combination biomolecules is "Glycoconjugates".

Glycoconjugates on cell surface and in the blood are responsible for cellular recognition processes that enable the body to inform the many complicated functions required for health.

Glyconutrients constitute important parts of glycoprotein molecules in the blood.

Some research have been done in the USA that list some health related benefits associated with single sugars. Nutritional supplement products are highly safe compared to synthetic drugs.

Expanded benefits and mechanisms of action of glyconutrients

Following is a list of expanded benefits and mechanisms of action.

(1) Body proteins and fats bind to glyconutrient (sugars) to form glycoconjugates (glycoproteins, glycolipids) which function as enzymes, immune system molecules, hormones and cell membrane, transport molecules and are involved in all aspects of human health structure and

function

(2) Glyconutritional sugars, which include Mannose, Galactose, Fucose, xylose, Glucose, Salic Acid (NANA) N-acetyl-glucosamine and N-acetyl galactosamine can be readily absorbed and directly incorporated (Glycosylates) into Glycoconjugates

(3) The body prefers to utilise glyconutritional sugars provided in the diet which requires less expenditure of energy and allows for more rapid production of needed glycoconjugates

(4) Glyconutritional sugars on the surface of one cell bind to sugar receptors on another cell which allows the cells to communicate with one another and defend against bacterial infection and allergies

(5) Glycoconjugates and glyconutritional sugars are anchored to the surface of cells by Glycosylphosphatidylinositols, which are found in abundance in human breast milk and are of particular importance to the health of newborn infants

Consolidated benefits from glyconutrient supplement

Immune system modulation glyconutrient are necessary for

healthy immune cells and immune system function to

(a) play key roles in many aspects of tissue healing and repair as well as cell survival

(b) enhance immune system functions

(c) have positive effects on asthma

(d) have positive effects on rheumatoid arthritis

(e) prevent arthritis

(f) substantially reduce pain and increase joint mobility in osteoarthritis

(g) glyconutrient help to inhibit growth and/or tumor cell

(h) glyconutrient help kill bacteria, viruses and fungi and thereby defend against infection

(i) it is important in regulating blood sugars levels and insulin release

Other biological effects of glyconutrient

Stimulate Calcium absorption which could be beneficial in preventing Calcium deficiency diseases such as osteoporosis. In fact, this glyconutrient supplement are using in the USA, Canada, Australia and many other countries for the benefits in human health.

Dr N M Kiron, MD, PhD is the Principal of Bangladesh Research Institute for Integrated Medicine.

Whole grains may curb belly fat, inflammation

Cutting calories helps people lose weight, but doing so by filling up on whole grains may be particularly heart-healthy, new research suggests.

In a study of obese adults at risk of heart disease, researchers found that those who trimmed calories and increased their whole-grain intake shed more belly fat and lowered their blood levels of C-reactive protein or CRP.

CRP is a marker of chronic, low-level inflammation in the blood vessels, and both abdominal fat and CRP, in excess, are linked to heart attack and stroke.

In contrast, dieters in the study who mainly ate refined grains, like white bread, were able to lose weight, but they trimmed less fat from the middle and showed no change in CRP.

The findings offer yet more incentive for people to opt for whole grains over highly processed versions, according to the researchers.

"This is the first clinical study to prove that a diet rich in whole grains can lead to weight loss and reduce the risk of several chronic diseases," Dr Penny Kris-Etherton, the senior researcher on the study, said in a statement.

She and her colleagues at Pennsylvania State University report the findings in the American Journal of Clinical Nutrition.

In general, experts recommend eating whole grains—such as oatmeal, brown rice and barley—rather than refined grains, like white bread and other products made from white flour. Whole-grain foods retain more of



the nutrients and fiber components of the grain.

This fact might explain why dieters in the current study showed added benefits when they ate whole grains, according to the researchers. For example, fiber-rich foods may have kept participants' blood sugar levels more stable throughout the day, and this, in turn, may have lowered their CRP levels.

Alternatively, CRP might have dropped because of the antioxidant nutrients that are present in whole grains but depleted in refined ones.

The study included 50 obese men and women who had metabolic syndrome, a collection of several risk factors for diabetes, heart disease and stroke—such as abdominal obesity, high blood pressure and high blood sugar.

All of the study participants cut calories for 12 weeks, but half were instructed to strive for whole grains, while the rest were told to choose refined grains. The whole-grain group was told to look for products with "whole grain" listed as the first ingredient on the label.

In the end, the average weight loss was about 8 to 11 pounds in both groups. However, the average CRP level dropped by 38 percent in the whole-grain group, while remaining unchanged in the refined-grain group. In addition, while both groups showed a similar change in waistline size, the whole-grain dieters showed a greater reduction in the percentage of fat around the middle.

The researchers recommend that consumers look at labels and be careful to choose products that are good sources of whole grain.

"There are a lot of foods around that claim they contain whole grain but are not really major sources of whole grain," Kris-Etherton said. She suggested looking for foods like oatmeal, breakfast cereals made from whole grains, whole-wheat pastas, granola and popcorn.

As a general rule, she said, consumers should buy grain products that are at least 51 percent whole grain. Products that put health claims about whole grains on their labels are required to contain at least that much whole grain.

Source: American Journal of Clinical Nutrition

WORLD HEALTH DAY 2008

Protecting health from climate change

World Health Day, on 7 April, marks the founding of the World Health Organisation (WHO) and is an opportunity to draw worldwide attention to a subject of major importance to global health each year. In 2008, World Health Day focuses on the need to protect health from the adverse effects of climate change.

The theme "protecting health from climate change" puts health at the centre of the global dialogue about climate change. WHO selected this theme in recognition that climate change is posing ever growing threats to global public health security.

Through increased collaboration, the global community will be better prepared to cope with climate-related health challenges worldwide. Examples of such collaborative actions are: strengthening surveillance and control of infectious diseases, ensuring safer use of diminishing water supplies, and coordinating health action in emergencies.

Climate change: An issue for the health sector

Health hazards from climate change are diverse and global in nature. The hazards range from higher risks of extreme weather events to changes in the dynamics of infectious diseases. Many of the leading killer diseases are sensitive to climatic conditions; their incidence and spread are likely to be affected by changing weather patterns.

The health impacts of climate change are already evident in different ways: more people are dying from excessive heat than before, changes are occurring in the incidence of vector-borne diseases, and the pattern of natural disasters is altering.

These impacts will be disproportionately greater in vulnerable populations, which include the very young, elderly, medically infirm, poor and isolated populations.

Action needs to be taken now.

Health Events



First conference on lung health held

STAR HEALTH REPORT

In order to share experiences and exchange views among physicians, first international conference on lung health entitled "Pulmocon 2008" held recently at a local conference centre in the city.

Bangladesh Lung Foundation organised the two day conference marked with a good number of seminars and symposiums. Renowned physicians from home and abroad congregated there and presented abstracts and research papers.

Professor Dr Mohammad Tahir, Vice Chancellor of Bangladesh University (BSMMU) was present as the Chief guest while Professor Dr M A Faiz, Director General of Health Services was the special guest.

Speakers at the seminar discussed about various diseases related to lung health, specially focused on tuberculosis, asthma and childhood pneumonia.

Professor Tahir expressed that

diseases related to lung are emerging as a threat by and by. He advised physicians to boost up their vigilance to give improved and proper care to the patients.

Professor Faiz urged doctors to work together to combat the national burden tuberculosis and suggested them to be very careful in giving drugs as multidrug resistance TB has already posed threat.

President of Bangladesh Lung Foundation Professor Dr Md Rashidul Hasan presided over the seminar and depicted the condition of lung health of our country. He figured out that 7 million people are living with asthma. Bangladesh is in sixth position among countries where TB is prevalent.

21.6% people over the age of 40 are suffering from various lung diseases. Childhood pneumonia is still a major cause of death. He urged doctors and civil society to raise awareness and to stand against the emerging threats.

Health camp in Tangail

To mark the International Mother Language Day, a large health camp was organised in Hatibandha village of Tangail district, says a press release.

More than 50 doctors of different specialty participated in the health camp to serve more than 5000 poor patients with medicine. It was held there for the fourth time. Eminent nephrologist and the chairman of KAMPS (Kidney Awareness, Monitoring & Prevention Society) Professor Dr M A Samad

organised the camp. Besides free medical prescriptions and medicine supply, awareness about kidney diseases and campaign against smoking were two focal points in the health camp, informed Dr Samad.

The medical camp was inaugurated by the Editor of daily Amar Desh newspaper Mr Amanullah Kabir.

A seminar was also held along with the health camp.