CEREBRAL PALSY

Early diagnosis can help leading active and self supporting lives

DR SELINA DAISY

Cerebral palsy (CP) is a condition that affects thousands of babies and children each year. It is not contagious. Cerebral palsy means the disorder of the brain, mainly due to brain damage occurring before birth, or due to lack of oxygen during birth resulting in weakness or problem in the way a person moves or positions his or her body

Normally the brain tells the rest of the body exactly what to do and when to do it. Since CP affects the brain, depending on what part of the brain is affected, a kid may not be able to walk, talk, eat, or play the way most kids do.

It is a non-progressive but often changing motor (referring to movement or which produces movement) impairment syndrome. The changing clinical picture results from developmental maturation and intervention.

Signs and symptoms

Symptoms of cerebral palsy can be as simple as having difficulty with fine motor tasks like writing or using scissors, or as profound as being unable to maintain balance or walk. Severely affected patients may have involuntary movements, such as uncontrolled motion of hands and drool. Others suffer from associated medical disorders, such as seizure (convulsion), speech problem, hearing problem, language disorder, ocular problem

(i.e. squint, refractory errors, fields defects etc.), feeding difficulties, behavioral problems and

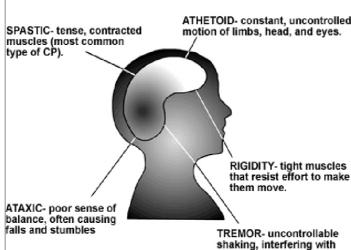
It can be classified mainly into two categories: physiologic and

Spastic CP is the most common type of cerebral palsy. It causes the muscles to be stiff and permanently contracted. Spastic cerebral palsy is often sub classified as one of five types that describe the affected limbs. Spastic diplegia (paralysis of a similar part on both sides of the body) affects legs more than arms. The legs often turn in and cross at the knees. This causes a scissors gait, in which the hips are flexed or bent, the knees nearly touch, the feet are flexed, and the ankles turn out from the leg, causing toe-walking, Learning disabilities and seizures are less common than in spastic

Spastic quadriplegia involves all four limbs. There is dysfunction of the muscles of the mouth and tongue, seizures, medical complications and increased risk for cognitive difficulties.

Dyskinetic cerebral palsy is characterised by slow, uncontrolled, writhing movements of the hands, feet, arms, or legs. Patients also may have abrupt, irregular, jerky movements or slow rhythmic movements with muscle tone abnormalities and abnormal postures (dystonia).

TYPES OF CEREBRAL PALSY



The muscles of the face and tongue may be affected, causing grimacing and/or drooling. When the muscles that control speech are affected, the patient experiences dysarthria (abnormal pronunciation of speech). Hearing loss is commonly associated with this form of CP.

Hypotonic cerebral palsy characterised by marked motor delay and decreased tone. Often confused as a floppy infant.

Ataxic cerebral palsy affects balance and depth perception. Persons with ataxic CP have poor coordination and walk unsteadily, usually placing their feet far apart. Many have trouble with quick or precise movements.

like writing or buttoning a shirt. Some also have intention tremor, in which a voluntary movement, like reaching for an object, sets

Mixed CP involves two or more types of cerebral palsy. While any mix of types and subtypes can

off trembling in the limb.

A kid with CP may present mild to server symptoms depending on how much of the brain is affected and which parts of the body that section of the brain controls. No one knows for sure what affects the most.

For some babies, injuries to the brain during pregnancy or soon after birth may cause CP. Sometimes the problem in the brain

STAR HEALTH REPORT

Dr Md Afzalur Rahman, Associate

Professor of National Institute of

Cardiovascular Diseases

(NICVD) presented research

paper at Euro PCR05

Interventional Conference held in

Paris, France. More than ten

thousand cardiologist from hun-

dreds of countries participated the

conference. Dr Rahman pre-

sented paper on "Recurrent stent

thrombosis". Euro PCR is one of

the biggest conference in the

world and a major European event

based on the exchanged of scien-

tific information and education of

selected as an International Fac-

ulty (by competition) of "TCT Asia

Pacific". TCT is a very sophisti-

cated organisation in the field of

Dr Afzalur Rahman also pre-

sented research paper entitled

"Stent thrombosis in the era of

coronary stenting" at 15th Asia

Pacific Congress of Cardiology

and 57th Annual Conference of

Meanwhile. Dr Rahman was

interventional cardiologists.

interventional cardiology.

HEALTH NEWS

STAR HEALTH REPORT

cardiologists

international recognition

occurs before the baby is born. **Complications**

Some people with CP have associated disorders like impaired intellectual development, seizures failure to grow and thrive, vision and sense of touch problems

As many as half of all patients with cerebral palsy have seizures. Seizures that recur without a direct trigger, such as a fever, are classified as epilepsy.

Children with moderate-tosevere cerebral palsy, especially those with spastic quadriplegia, often experience failure to grow or thrive. Infants fail to gain weight normally; young children may be abnormally short; and teenagers may be short for their age and may have slow sexual development. These phenomena may be caused by a combination of poor nutrition and damage to the brain centers that control

Some patients, particularly those with spastic hemiplegia, have muscles and limbs that are smaller than normal. Limbs on the side of the body affected by CP may grow slower than those on the other side. Hands and feet are most severely affected.

Vision and hearing problems are more common in people with cerebral palsy than in the general population. Differences in the left and right eve muscles often cause the eyes to be misaligned. Strabismus can lead to poor vision and impaired depth perception, some physicians recom-

An inspiration to young

Bangladeshi interventional cardiologist accorded

mend corrective surgery.

Importance of

Early identification has significant implication for the family and necessitates early intervention to achieve the maximum holistic potential of the child. The philosophy behind early intervention is based on the following facts:

better with stimulation.

IQ of emotionally deprived children is poorer than stimulated children.

first decade of life provides a window of opportunity for active intervention.

Actually a child with CP is not hopeless. Half of the child with CP have average or above IQ.

proper guidance, a vast majority can lead active, self supporting lives. Thus early diagnosis is prerequisite.

The writer is an Associate Professor of Pediatric

Diagnosis

The diagnosis of CP is essentially clinical. It involves detail history of prenatal, natal and postal history and careful physical and neurodevelopmental examination to identify deficit type and topography (description of each particular part of the body), which is required for management.

early diagnosis

A neurological insult recovers

The plasticity of the brain in the

With timely medical care and

Neurology and Clinical Neuro-physiology of Dhaka Medical College, Dhaka.

times on 'cholesterol' from public and physicians. High cholesterol levels are associated with an increased risk of heart diseases. The two main fats in the blood are

A considerable amount of

attention has paid in recent

the time

cholesterol and triglycerides (TGL). They are taken through diet, but what is not widely appreciated is - cholesterol is also made naturally in almost every tissue of the body.

Cholesterol: Talk of

All health information to keep you up to date

A lipoprotein profile measures the level of cholesterol in the blood

HDL

Triglycerides

Total cholesterol

A healthy body is normally capable of balancing the amount of cholesterol consumed. High cholesterol may be due to genetic defect in body's ability to extract cholesterol from the blood or an oversupply of dietary fat and cholesterol. Cholesterol is important in bile formation, steroid hormone production, vitamin D synthesis and in cell membrane structure. So cholesterol is not always bad for everyone especially in early ages.

It is essential for most people to have the following basic investigations if illness is suspect related to chest or heart. These are -

a) Pulse / blood pressure/checking neck veins

b) Blood tests: Fasting blood sugar (FBS) including lipid profile, urea and electrolytes. It is better to test the blood in empty stomach.

c) Chest X-ray

d) ECG, echo-cardiogram f) Further investigations in some cases, if needed.

There are many more unrecognised people around us with much higher risk of heart disease. Heart disease in our country has increased due to generally unhealthy lifestyle (like stress, diet, obesity etc.) and five other risk factors like smoking, high blood pressure, high cholesterol levels, uncontrolled diabetes and family history

Nevertheless there is an close relationship between smoking and cholesterol. Smoking seems to promote the deposition of cholesterol, make the blood stickier and lowers level of substances in the blood which help defend arteries from clogging.

5 tips for those with high cholesterol

1. Take reasonable physical exercise including walking; if possible swimming or some other sensible sporting activity.

2. Reduce the amount of beef, mutton and other animal fats. Trim down fullcream milk and dairy products and cut back on sugar (No 'Mishtis' until the LDL comes down to '100') as much as possible. As well as stop eating brain, liver and kidney of different animal. Reduce salt intake - both table and cooking. Take green, leafy vegetables and apples and oranges everyday. Garlic and onion are also not bad.

3. Stress and worry will ultimately affect the heart. Try to overcome this by yourself as much as possible, as at the end of the day you will have to value your

4. Modifying the diet is a good way to lower cholesterol level; research studies suggest that it can lead to a reduction in cholesterol level by 10-15 percent. Many individuals may need cholesterol lowering medicines. Consult a physician (preferably a cardiologist) regarding cholesterol lowering drugs.

5. One reading of high cholesterol is not enough to act on. Lipid profile test could be repeated.

NUTRITION CORNER

Ice-cold watermelon is less nutritious

be refreshing, but it can be less nutritious than watermelon served at room temperature, US Department of Agriculture scientists reported.

Watermelons stored at room temperature deliver more nutrients than refrigerated or freshly picked melons.

Penelope Perkins-Veazie and Julie Collins of the USDA's South Central Agricultural Research Laboratory in Lane, Oklahoma looked specifically at carotenoids - antioxidants that can counter the damage caused by sun, chemicals and day-today living.

Watermelon is rich in lycopene, an antioxidant that makes watermelons and tomatoes red and may help prevent heart disease and some cancers. Perkins-Veazie and Collins tested several popular varieties of watermelon stored for 14 days at 70 F (21 C), 55 F (13 C) and 41 F (5 C).

Whole watermelons stored at 70 degrees Fahrenheit, which is about room temperature in air-conditioned buildings, had substantially more nutrients, they reported.

Fish in diet may help

Eating broiled or baked fish appears to have a

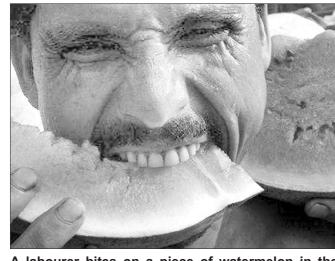
beneficial effect on the electrical system of the heart,

which may help prevent life-threatening heart rhythm

Dr Dariush Mozaffarian, of Harvard Medical

disorders, according to a new report.

maintain heart rhythm



A labourer bites on a piece of watermelon in the capital trying to cool off in extreme summer heat.

Compared to freshly picked fruit. watermelon stored at 70 F gained up to 40 percent more lycopene and 50 percent to 139 percent extra betacarotene, which the body converts to

They described their findings showed watermelons continue to produce these nutrients after they are picked and that chilling slows this process.

"The usual shelf life for water-

melons is 14 to 21 days at 13 degrees Celsius (55 F) after harvest," the researchers noted.

At refrigerated temperatures, like 41 F (5 C), watermelon starts to decay and develop lesions after a week, they noted.

Source: Journal of Agricultural and Food

PCR05 24th - 27th MAY, 2005

Dr Afzalur Rahman presenting scientific paper in Euro PCR05

Cardiological Society of India, which was held in Mumbai, India. Dr rahman expressed that it was a privilege and a very much prestigious event to have the opportunity for presenting a paper in such conference. Among five hundred participants, Dr Rahman's presentation was recognized as the

Dr Afzalur Rahman said, "All these recognitions prove that our

work in the field of cardiology is world standard. It can help to bring back the dignity of our local doctors, at least in cardiology sector." He also opined that there is almost no reason to seek cardiac care abroad, since we have developed in cardiology tremendously over last decade

In Euro PCR05 Dr Rahman was asked to state the name of his country for two times, because he was the first Bangladeshi cardiologist to present scientific paper in the conference. Dr Afzalur Rahman expressed to Star Health that he felt proud of representing Bangladesh in a world conference like Euro PCR 05.

Exchange of ideas and views through the international conferences, workshops, seminars are good ways to keep up-to-date with the latest medical updates and to increase technical expertise as well as professional skills. Dr Rahman commented that young doctors should take part in those continuous medical updating processes.

HEALTH TIPS

Water aerobics may ease back pain during pregnancy



Water aerobics can help ease the pelvic and back pain that plague many women during pregnancy, Swedish researchers reported.

Among healthy pregnant women, those who did water aerobics once a week reported less low back pain and less work missed due to back pain than those who performed landbased exercise weekly.

More than one third of women experience low back pain during pregnancy, which can increase the risk of suffering this type of pain later on. To compare the effectiveness

of land- and water-based exercise routines in easing lower back and pelvic pain among pregnant women, the researchers randomly assigned 390 healthy pregnant women to one or other of the two types of sessions, once weekly.

Both the land- and water-based exercise routines were specifically designed for pregnant women, and included 45 minutes of activity followed by 15 minutes of relaxation. Women began exercising, on average, at about 19 weeks of pregnancy.

Women in the water exercise group reported less pregnancyrelated lower back pain than those who exercised on land, and while none of the water exercisers took sick leave due to low back pain, six women in the land-based exercise programme did

Pregnant women should be encouraged to continue with moderate physical activity as long as possible. Water aerobics is a simple and inexpensive form of physical activity.

Source: Journal of Obstetric, Gynecologic &

to 1990 and involved subjects who were at least 65 capital. It was the second internacontrol. They emphasised that hospital waste; Updated informa-Intake of tuna or other broiled or baked fish at tion regarding antibiotic policy; tional seminar organised by Infecphysicians, nurses and other health least once a week was associated with a slower Management of infection in microtion Control And Prevention Proprofessionals have tremendous role

heart rate than was eating these fish less than Moreover, fish intake at least five times per week was associated with an even healthier heart rhythm. Consumption of marine n-3 fatty acids appeared to have similar effects.

School, Boston, and colleagues analysed data

from 5096 adults enrolled in the Cardiovascular

Health Study to investigate the link between

dietary intake of fish n-3 fatty acid and features

The population-based study, which focused on

cardiovascular disease risk factors, ran from 1989

seen on electrocardiograms.

Source: Journal of the American College of Cardiology

tional seminar on "Infection Control And Prevention (ICP) In Bangladesh" was held at Begum Sufia Kamal Auditorium, Shahbagh in the

Recently a three day long interna-

gram In Bangladesh (ICPPB) in collaboration with Bangladesh Medical Association of North America (BMANA). ICPPB is an organisation working on infection control stressing the issues like safe disposal of infectious waste, assessment and

reduction of bacterial load in oper-

policy and hand washing after touching each patient. Eminent microbiologists and

units, formulation of antibiotic

Int'l seminar on ICP held

clinicians of our country and renowned physicians of USA presented papers and delivered lectures on various burning aspect of infection in preventing hospital-acquired infection (nosocomial infection) by creating a safe environment by proper hospital waste management and adopting an antibiotic policy. Physicians and health workers from different areas of the country took

part in the seminar. Topics discussed in the threeation treaters and intensive care day seminar were - Nosocomial

infection; MRSA infection; Positive blood culture; Infective endocarditis; Management of biological laboratory were revealed. Monowara Hospital was rewarded for its great achievement in infection control while partici-

management; Hand hygiene;

Common culture isolates and their

drug resistance pattern, sepsis

update; Prevention of surgical site

pants were accorded certificate of participation.

In the next issue, "Your Doctor" will respond to problems on drug addiction or abuse. Send your questions to Your Doctor, Star Health, The Daily Star, 19, Karwan Bazar, Dhaka 1215 or e-mail your problem to starhealth@thedailystar.net

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