

## Gastro-oesophageal reflux: The misunderstood disease

After consuming huge, oily meal or a full packet of spicy 'chanachur' you often experience a burning pain in your chest and sometimes in the throat. We usually call this 'heartburn'. According to most doctors, thousands of Bangladeshis specially living in the cities suffer from Gastro-Oesophageal Reflux Disease (GERD), or what is known as 'heartburn'. Some often misdiagnose GERD as peptic ulcer or simple acid related situation rather than disorder, some also term it as a 'gas problem' in our villages. For the majority, it is a short-term trouble, activated by something like highly spiced food or even fizzy drinks in empty stomach. For some, reflux causes hours of extreme pain every day and makes sleep more or less difficult.

lying down flat is the worst position for reflux sufferers.

The most frequently used drugs for reflux disease is antacid tablets and mixtures, which reduce the damaging effects of stomach acid. In the western world 'Gaviscon' is mostly used instead of antacids. This drug is a combination of antacids and 'alginate' and 'gastrocote', which form a protective coating over the lining of the lower oesophagus and upper part of the stomach. In severe cases where heartburn is not easily relieved, ranitidine, omeprazole, lansoprazole type of drugs are drug of choice to reduce acid production in the stomach. Other drugs like cisapride, metaclopramide or sucralofate are also used. Some also uses 'Helicobacter treatment strategy' to treat reflux.

Here are some simple steps to help avoid heartburn:

- Avoid food with a high acid content, like tomato sauce.
- Three C - Cigarettes, Coffee and Chocolates are contributors to reflux.
- Being overweight increases the chances of heartburn.
- Don't eat at least three hours before going to bed.
- Use pillows to elevate your head during sleep.
- Avoid tight clothing. It puts extra pressure on your abdomen, increasing heartburn symptoms.
- Try to avoid stress, which increases sensitivity to stomach acid.
- Many drugs like aspirin, ibuprofen, naproxen irritates the stomach lining. So, do not forget to ask your doctor about side effects of a prescribed drug.

The commonest symptoms of reflux are heartburn and regurgitation. Regurgitation means back-flow of acid or bitter tasting fluid into mouth. The stomach naturally produces acid, which helps to sterilise and digest the food we eat. Reflux occurs when acid from the stomach flows back up into the oesophagus. Normally a muscle at the base of the oesophagus shuts like a gate once food has moved to the stomach. For people with reflux, the muscle remains open, allowing acid to escape and make painful contact with the lining of the oesophagus. The main types of acid related disorders are reflux and peptic ulcer.

Many people live with reflux for ages. One can get rid of this disease if s/he wishes. First of all - it is important to change lifestyle. Lifestyle change means modifying eating habits (which includes regular timing) and diet, taking a variety of drugs and changing sleeping patterns. It seems that

# Bypass surgery patients need special care

Says Dr Sarma in an interview

## STAR HEALTH DESK

Dr Apurba Kumar Sarma, the chief cardiac surgeon of Z H Sikder Cardiac Care and Research Centre of Z H Sikder Women's Medical College and Hospital is doing excellent service to the nation in the field of cardiac surgery. Within a very short period of time, he has performed more than 500 heart operations in Bangladesh without any mortality. Not only CABG (Coronary Artery Bypass Graft), he performs congenital heart surgeries, valve replacements and repairs, major vascular surgeries, carotid endarterectomies and so on. The outcome is very good in comparison to any part of the world.

To his credit, Dr Sarma has done aortic root replacement with artificial aorta for marfan's syndrome (hereditary condition where the patient has extremely long fingers and toes, with abnormalities of the heart, aorta and eyes), repair of post myocardial infarction, ventricular septal defect (rupture), left ventricular aneurysm and CABG in a same patient; combined cerebral, myocardial, and both lower limb revascularisation procedure in same sitting in a critical patient successfully first time in Bangladesh.

Dr Sarma has been awarded many prizes for his outstanding contribution to the medical science. He has been selected for



Dr Apurba Sarma is preparing for a bypass surgery.

MARQUIS Who's Who in medicine and healthcare for 2006-2007, which is published from USA.

Recently, in a brief interview session with Star Health, Dr Sarma talked about different aspects of various cardiac surgeries and gave valuable suggestions about post surgical management of coronary artery bypass graft (CABG), which is better known as bypass surgery.

**Star Health (SH):** What is beating heart surgery? Do you perform it?

**Dr Sarma (DS):** Beating heart surgery most commonly refers to coronary artery bypass graft

surgery performed on the beating heart. Standard coronary artery bypass surgery is performed by "arresting" the heart and supporting the vital organs of the body by pumping oxygenated blood from the heart-lung machine into the patient.

I perform both the conventional cardiac surgery and beating heart surgery.

**SH: Between those two methods, which one is better?**

**DS:** Standard CABG is time tested, beating heart CABG is not the replacement of standard CABG, rather both are complementary to each other.

**SH: Does conventional CABG**

*cost more than the beating heart surgery?*

**DS:** No. Cost involved in beating heart surgeries are always more as tissue stabilising devices are disposable.

**SH: What is "off-pump" coronary artery bypass surgery?**

**DS:** The beating heart surgery, done without using heart-lung machines is called as "off-pump" coronary artery bypass surgery.

**SH: Tell us something about Robotic heart surgery?**

**DS:** The trend in cardiac surgery is to minimise surgical trauma while reducing the incidence of perioperative morbidity. The goal is to return patients to functional levels as early as possible after surgery. Minimally invasive techniques have been introduced to fulfill such expectations. It is still on research level.

The cost is extremely high. A 3D camera is attached with an intelligent robot and via small incisions, operations are performed, which helps patients for early recovery.

**SH: Some cardiac surgeons avoid high risk patients for surgery, whereas you have handled so many high risk patients. How do you do this?**

**DS:** I am particularly interested to coronary artery reconstruction surgery, which is one of the most complicated and high risk procedure. More than 30 percent patients I did in Bangladesh were high risk and everybody is doing fine.

**SH: What are the complications of CABG and when it is a risky procedure?**

**DS:** Now-a-days complications of CABG are very rare. Bypass surgery is now a very safe procedure throughout the world. Normally the risk is around 1 percent. However risk may increase to 3-5 percent, if patients have following conditions like:

- Age more than 75 years.
- Pumping capacity of the heart is reduced from normal (less than 25 percent).
- Diffuse coronary artery disease.
- Longstanding poorly controlled diabetes mellitus, hypertension and dyslipidaemia.

**SH: Please, give your advice to a patient of CABG?**

- DS:** A patient of CABG should -
- Control blood pressure and diabetes adequately
  - Quit smoking
  - Daily work
  - Avoid exertion upto six weeks from the discharge from hospital.
  - Avoid heavy works as well for 3 months
  - Perform exercise slowly
  - Avoid much work bending forwards
  - Avoid lifting heavy goods (more than 5 kg)
  - Avoid lifting anything suddenly by one-hand
  - Strictly avoid swimming for 8 weeks
  - Sexual contact should be avoided for 3 months after operations
  - Bath: Take a bath using soap. You can sit on a stool while bath-

ing, if you feel necessary. It is better to avoid bathtub after operation for 3 months

• Travel or car driving: You can travel by airplane, train or car/bus after discharge from hospital. But you should yourself refrain from carrying suitcase, briefcase and carrying little children for three months. Driving should be avoided for 3 months

• Walking: Maintain a habit of walking and increase it gradually. Increase the speed of walking and distance slowly. Empty stomach walk is preferable

• Rest: You need physical as well as mental rest. Mental stress may be harmful for you. Sleep for 5-6 hours at night

• Return to work: Start your normal work according to the advice of a physician.

**SH: Please tell us about food habit after surgery.**

**DS:** Loss of appetite of the patient after surgery is common. The appetite increases with time. Give up lipid, fat, and salt. Chicken meat is comparatively better than beef or mutton. Similarly shrimps and lobsters also have high amount of unhealthy fats. Yellow portion of the eggs has a lot of cholesterol. Milk and dairy products like cheese, butter etc. should be avoided. Remember, boiling, steaming or grilling are better styles of cooking than our traditional methods. Eat plenty of row vegetables and fruits.

## SQUAMOUS CELL CARCINOMA

# Modern treatment options give better outcome

DR TARIQUL ISLAM

Arsenicosis is a public health problem in Bangladesh. The worst effect of arsenic related health hazards is the skin and urinary bladder cancer. Among the skin cancers, the squamous cell carcinoma (SCC) is the commonest. It arises from the epidermis (outer layer of skin, including the dead skin on the surface) and resembles the squamous cells that comprise most of the upper layers of skin. SCCs may occur on all areas of the body including the mucous membranes (wet membrane which lines internal passages in the body (such as the nose, mouth, stomach and throat) and secretes mucus), but are most common in areas exposed to the sun.

Although SCCs usually remain confined to the epidermis for some time, they eventually penetrate the underlying tissues if not treated. When this happens, they can be disfiguring. In a small percentage of cases, they spread (metastasize) to distant tissues and organs and can become fatal. SCCs that metastasize most often arise on sites of chronic inflammatory skin conditions or on the mucous membranes or lips.

### Warning signs of SCC

- (a) A wart-like growth that crusts and occasionally bleeds.
- (b) A persistent, scaly red patch with irregular borders that sometimes crusts or bleeds.
- (c) An open sore that bleeds and crusts and persists for weeks
- (d) An elevated growth with a central depression that occasionally bleeds. A growth of this type may rapidly increase in size.



(e) A persistent, scaly red patch with irregular borders that sometimes crusts or bleeds.

(f) An open sore that bleeds and crusts and persists for weeks.

### Treatment options

After clinical examination, a biopsy is needed to confirm the diagnosis. This involves removing a piece of the affected tissue and examining it under a microscope. If tumor cells are present, treatment (usually surgery) is required.

Fortunately, there are several effective ways to eradicate SCC. The choice of treatment is based on the type, size, location, and depth of penetration of the tumor, as well as the patient's age and general state of health.

### Curette and electrodesiccation

As with AKs, the growth is scraped off with a curette and the tumor site desiccated with an electrocautery needle. But when treating BCCs or SCCs, the procedure is typically repeated a few

times to help assure that all cancer cells are eliminated.

### Excisional surgery

Along with the above procedure, this is one of the most common treatments. Using a scalpel, the physician removes the entire growth along with a surrounding border of apparently normal skin as a safety margin. The incision is closed, and the growth is sent to the laboratory to verify that all cancerous cells have been removed.

### Radiation

X-ray beams are directed at the tumor. Total destruction usually requires several treatments a week for a few weeks. This is ideal for tumors that are hard to manage surgically and for elderly patients who are in poor health.

### Mohs micrographic surgery

The physician removes the visible tumor with a curette or scalpel and then removes very thin layers of the remaining surrounding skin one layer at a time. Each layer is

checked under a microscope, and the procedure is repeated until the last layer viewed is cancer-free. This technique has the highest cure rate and can save the greatest amount of healthy tissue. It is often used for tumors that have recurred or are in hard-to-treat places such as the head, neck, hands, and feet.

### Cryosurgery

It is especially useful when a limited number of lesions are present. Liquid nitrogen is applied to the growths with a cotton-tipped applicator or spray device. This freezes them without requiring any cutting or anesthesia. They subsequently blister or become crusted and fall off. Some temporary redness and swelling can occur. In some patients, pigment may be lost.

### Laser surgery

Laser is very effective to treat this sort of cases. It gives good control over the depth of tissue removed, much like chemical peels. Laser is also used as a secondary therapy when topical medications or other techniques are failed.

### Photodynamic Therapy (PDT)

PDT can be especially useful for lesions on the face and scalp. Topical 5-aminolevulinic acid (5-ALA) is applied to the lesions.

### Imiquimod

FDA approved imiquimod for the treatment of genital warts. This topical cream is a promising new treatment for actinic keratosis and Bowen's disease. It causes cells to produce interferon, a chemical that attacks cancerous and precancerous cells.

control and palliative care were applied.

10. 40% of cancer could be prevented, mainly by not using tobacco, having a healthy diet, being physically active and preventing infections that may cause cancer.

## EXERCISE TIPS

### Safe exercising in diabetes

Exercise is an important part of everyone's lifestyle, but it is especially significant for people with diabetes. That is because exercise helps to lower glucose levels and can also increase insulin sensitivity. Here are some tips to make sure you exercise safely

- Check your blood glucose level before and after exercising to determine if your level is too high to exercise safely, or if you need to take action before exercising to prevent hypoglycemia. Your doctor can help you decide whether you should eat a snack or change a medication dose before exercise, to avoid hypoglycemia.
- Exercise one to two hours after a meal - that is the best time to avoid hypoglycemia.
- If you have retinopathy (any disease of the retina which is specially linked to diabetes), avoid activities that involve jarring, straining or bearing

down (such as handball or heavy weight-lifting), since they can damage fragile blood vessels in the eye.

- If you have peripheral neuropathy (disease involving destruction of the tissues of the nervous system), be sure to choose the right footwear and have a thorough foot examination before starting an exercise program. If you have severe loss of sensation, avoid repetitive weight-bearing activities like basketball, biking or swimming would be better.
- Be sure to drink plenty of fluids, since dehydration can hinder your body's ability to handle glucose.

If you have a history of high cholesterol and triglycerides or a family history of heart attacks or if you have autonomic neuropathy, have a cardiovascular exam before starting an exercise programme.

### "Precooling" before exercise helps beat the heat

Cooling down before warming up may help exercisers keep going during the dog days of summer, according to a small study.

Researchers found that when they outfitted male cyclists with special "precooling" garments before a workout in the heat and humidity, the athletes showed cooler body temperatures, lower heart rates and less sweating.

The cool down came courtesy of shirts and pants with tubing that allowed cold water to run through the clothes. Other studies have shown that

a pre-workout dip in a cold bath or exposure to cold air can help exercisers lower their odds of heat strain in hot, humid weather.

Physical activity causes the body's core temperature to rise, with hot, humid weather spurring a particularly rapid ascent; at a certain point, an exerciser must slow down or risk heat-related illness. The idea of precooling is to increase the body's heat tolerance by starting exercise with as cool a body temperature as possible.

## Your Doctor



In the next issue, "Your Doctor" will respond to problems of gynaecology. Send your questions to Your Doctor, Star Health, The Daily Star, 19, Karwan Bazar, Dhaka 1215 or e-mail your problem to

1. There are more than 100 types of cancers; any part of the body can be affected.
2. In 2005, 7.6 million people died of cancer - 13% of the 58 million deaths worldwide.
3. More than 70% of all cancer deaths occur in low and middle income countries.
4. Worldwide, the 5 most common types

of cancer that kill men are (in order of frequency): lung, stomach, liver, colorectal and oesophagus.

5. Worldwide, the 5 most common types of cancer that kill women are (in the order of frequency): breast, lung, stomach, colorectal and cervical.
6. Tobacco use is the single largest preventable cause of cancer in the world.
7. One fifth of all cancers worldwide are caused by a chronic infection, for example human papillomavirus (HPV) causes cervical cancer and hepatitis B virus (HBV) causes liver cancer.
8. A third of cancers could be cured if detected early and treated adequately.
9. All patients in need of pain relief could be helped if current knowledge about pain

control and palliative care were applied.

10. 40% of cancer could be prevented, mainly by not using tobacco, having a healthy diet, being physically active and preventing infections that may cause cancer.