

Coping with breast cancer

PROF DR MD TAHMINUR RAHMAN

October month is being observed as breast cancer awareness month all over the world. This is very important and timely issue which should be addressed properly.

Breast cancer is the leading cancer of the female (about 32 percent of all cancers) and important cause of increased morbidity and mortality. In Bangladesh about 35,000 women die of breast cancer annually.

Who are at risk?

a. Family having history of breast cancer (especially first degree relatives like mother, sisters and daughters) are at increased risk of developing breast cancer than those having no family history.

b. Hormone, especially more estrogen exposure due to early menarche (start of menstrual periods), late menopause (cessation of menstruation), use of estrogen pills and women taking HRT (Hormone Replacement Therapy) are at increased risk of developing breast cancer.

c. Breast cancer is common in nulliparous (women who has never had a child) and mothers who do not fed breast milk to their child.

d. Women who give birth to first

child before 20 years have 50 percent reduced possibility of developing breast cancer than those who have given birth to first child after 35 years.

e. Usually breast cancer does not develop before 25 years. 70 percent of breast cancer is found in women after 50 years of age, the average age being 64 years.

f. Caucasian women are at the highest risk of developing breast cancer than other races.

g. Frequent biopsy of breast, trauma can increase the risk of breast cancer.

Symptoms of breast cancer

It is very unfortunate that breast cancer has no symptom at the early stage. However, if you notice any of the following symptoms, immediately consult a doctor for advice.

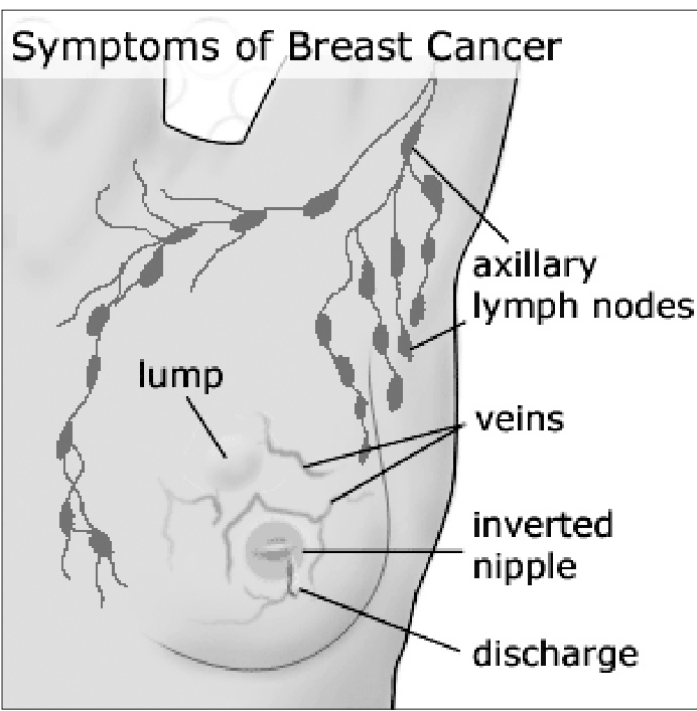
a. Any lump, ulcer, wound in the breast or in the armpit.

b. Any variation in the breast size and shape.

c. Any discharge from the nipple as water, pus or blood.

d. Any change of colour in breast skin like eczematous change, orange appearance, wrinkling, redness, and fixation of skin to the underlying chest wall.

e. Any generalised vague symptoms like anemia, lethargy, tiredness, loss of weight in spite of



normal diet, anorexia, feverish feeling.

Diagnosis

a. Early diagnosis is more important for treating breast cancer. Self examination of breast is the best method of detecting any lump or changes described above. Examination by doctor is the recommended if you suspect

reduced to 30 percent by detecting mammographic changes.

C. FNAC (Fine Needle Aspiration Cytology) is also an important tool for diagnostic purpose.

Treatment options

If the cancer is intraductal (cancer confined to the ducts of the mammary gland), surgery is needed for removal of the lump (Lumpectomy) or removal of the whole breast (Mastectomy). If it is infiltrating cancer (spread to the surrounding tissue), radical mastectomy is required. Combination of chemotherapy and radiotherapy before or after surgery may be needed according to the condition of the patient.

Preventive measures

a. Frequent self examination/examination by a doctor of breast, at least every year especially who are at risk.

b. Consultation is strongly recommended if you notice any change of skin colour, wrinkling, fixation of breast skin to chest wall, nipple discharge, swelling, ulcer, variation in size and shape of breast.

c. After 40 years yearly mammography is needed for every woman after the consultation of a physician.

d. Marriage at proper time and taking first child at proper age (20-30 years) are required. Women

should avoid more exposure to estrogen.

e. Women having family history of breast or other cancers should perform routine check up of the breast, mammography and FNAC, biopsy after consulting the doctor.

f. Breast feeding is helpful to avoid breast cancer.

g. Avoid excessive alcohol, cigarette smoking and weight gain. Do regular exercise.

Leading a normal life with habits of taking proper healthy meals, sleep, exercise and avoiding alcohol, cigarettes, weight gain, marriage and pregnancy at proper age, less exposure to estrogen will help lowering the risk of breast cancer.

Those who have family history of breast or any other cancer should do periodic check up according to the advice of a doctor and regular breast examination is needed. These will help in early diagnosis and better management of breast cancer patients and also make this breast cancer awareness month more effective and fruitful.



All health information to keep you up to date



Baby massage

Having a proper massage is claimed and widely believed to be beneficial. Latest research now shows that babies can get benefit from massage too.

According to experts in 'baby massage', when babies are massaged, they gain more weight, sleep and eat better, and have a better relationship with their parents. Some researches have found – when premature babies are massaged daily, they gained 47 percent more weight than other premature babies.

Dr Tiffany Field, a world expert in baby massage, believes that the massage stimulates the 'vagus nerve' (it is a mixed nerve, having motor and sensory functions and a wider distribution than any other cranial nerves),

which in turn activates the release of food absorption hormones.

It is also an important boost to a baby's immune system. Researchers now have enough evidence in regard to massage helping immune function to say that massage should be right up there with diet and exercise on a daily basis. Full term babies can also enjoy the same benefits. As well, massage is effective for bad sleepers. According to experts, 'after bath' is the perfect time for a massage, since it works best if the baby is naked.

Full term babies benefit most by being massaged once a day, premature babies need 3 massages a day, 15 minutes each for at least 10 days.



The same brain circuits are involved when obese people fill their stomachs as when drug addicts think about drugs, a finding that suggests overeating and addiction may be linked, researchers reported.

Overeating may be an addiction as well

REUTERS, Washington

The same brain circuits are involved when obese people fill their stomachs as when drug addicts think about drugs, a finding that suggests overeating and addiction may be linked, US researchers reported.

The finding may help in creating better treatments for obesity – a growing problem now-a-days.

"We wanted to know why, when people are already full, why people are still eating a lot," said Dr Gene-Jack Wang of Brookhaven National Laboratory in Upton, New York. "We were able to simulate the process that takes place when the stomach is full, and for the first time we could see the pathway from the stomach to the brain that turns 'off' the brain's desire to continue eating."

Wang and colleagues tested seven obese volunteers who had been fitted with a gastric stimulator – a device that tricks the body into thinking the stomach is full, a state known as satiety. They used a positron emission tomography or PET scan to see which parts of the brain activated when the stimulator was activated.

They also carefully questioned their volunteers, all of whom were very obese, about why and when they overate. "We thought the activated area (of the brain) must be in the satiety center, which we learned in medical school is supposed to be in the hypothalamus," Wang said. But they did not see activity there.

"We saw a lot of activity in all areas of the brain, especially in the hippocampus. That region is related to learning, memory and is also related to a lot of things such as sensory and motor impulse and emotional behavior," Wang said. Writing in the Proceedings of the National Academy of Sciences, Wang and colleagues said the hippocampus was 18 percent more active when the gastric stimulator was on. The stimulators also sent messages of satiety to brain circuits in the orbitofrontal cortex and striatum, which have been linked to craving and desire in cocaine addicts.

"This provides further evidence of the connection between the hippocampus, the emotions, and the desire to eat, and gives us new insight into the mechanisms by which obese people use food to soothe their emotions," said Wang.

The volunteers were all genuinely hungry – they had been fasting for 16 or 17 hours when the PET scans were run. The stimulator succeeded in making them feel less hungry, Wang said. But the surprise was in which brain circuits it used in doing so.

"It was very similar to a study on when cocaine abusers, when they think of cocaine, they have a craving for cocaine," he said. "This new pathway should be explored in further studies to determine if there are any implications for treating or preventing obesity."

Iodine deficiency can cause multisystem disorders

DR SHAMIM AHMED

Iodine deficiency disorder (IDD) is a major public health problem for the populations, particularly for pregnant women and young children. They are a threat to the social and economic development of the countries. Iodine deficiency is the single most significant cause of preventable brain damage and mental retardation.

Iodine is an essential component of the thyroid hormones. Failure to have adequate iodine leads to insufficient production of these hormones, which affects many parts of the body, particularly muscle, heart, liver, kidney and the developing brain. Inadequate hormone production adversely affects these tissues, resulting in the disease states known collectively as the Iodine Deficiency Disorders (IDD) and affect all stages of human growth and development.

The spectrum of IDD across the life span includes (1) Foetus: spontaneous abortions, still births, miscarriage, congenital anomalies, endemic cretinism and increased perimortality (2) Neonate: neonatal goitre, hypothyroidism and mental retardation (3) Child and adolescent: goitre, retarded physical development and impaired mental function, learning disabilities,



increased childhood mortality (4) Adult: goitre, hypo-thyroidism and impaired mental function resulting in decreased productivity. Goitre is the most visible manifestation of IDD. The most devastating outcome of these consequences is on the developing brain.

Iodine occurs naturally in very few specific foods. In nature, iodine is primarily found in oceans and seas, therefore seafood is a rich dietary source of iodine. Other iodine rich foods include sea weed, oysters, sea fish including sardines and lobsters. Our food culture does not allow access to most marine foods.

Iodine is present in the soil and is ingested through foods grown on that soil. The lack of iodine in the soil results in deficiency in all forms of plant life and cereals grown in the soil. Food grown in iodine deficient regions will not provide sufficient iodine to the population.

The presence of malnutrition is another factor that contribute to the development of IDD. Protein Energy Malnutrition (PEM) may interfere with iodine uptake by the thyroid gland, therefore altering normal thyroid function.

The recommended strategy for IDD control is based on correcting the deficiency by increasing iodine intake through food fortification. In order to increase the availability and consumption of iodine, iodisation of salt is recommended.

Since humans universally consume salt at fairly constant amount daily, it is an ideal vehicle to deliver micronutrients like iodine to the population at large.

The addition of iodine to salt does not impart any colour, taste or odour to the salt. The cost of iodisation is low. An adult requires approximately 150 micrograms of iodine a day. A pinch of iodised salt is enough to overcome the consequences of IDD.

Insulin cell transplant helps control diabetes

An international study confirms that transplantation of insulin-producing pancreas cells, called islets, can help stabilise blood sugar levels in people who have hard-to-control type 1 diabetes.

However, the transplanted islet cells gradually lose their ability to produce insulin, the researchers report.

The first successful islet transplantations were performed on seven patients in 2000 by a team led by Dr A.M. James Shapiro.

Shapiro, from the University of Alberta in Canada, and his associates have since conducted a subsequent trial to evaluate the feasibility and reproducibility of the procedure.

The 36 adult subjects in the trial had type 1 diabetes for at least 5 years, along with glucose levels that swung widely from too high to

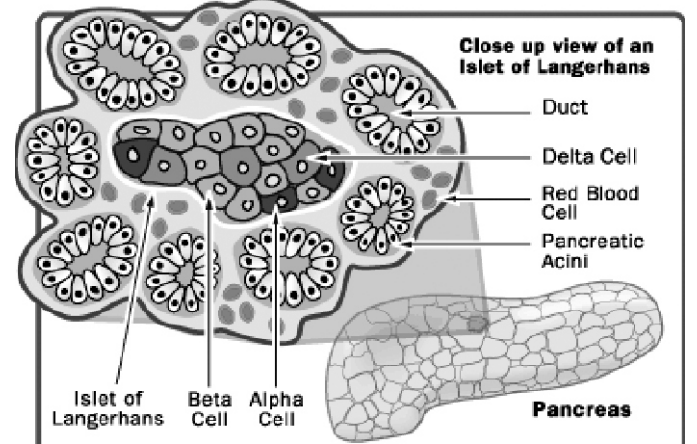
too low.

Between 2001 and 2003, the patients received up to three perfusions of islet cells, so long as islet function persisted after the preceding transplantation. The islets were isolated from the pancreas of brain-dead donors.

The primary endpoint – independence from insulin injections with adequate glucose control at 1 year after the transplants – was achieved in 16 patients. Ten subjects had partial graft function, with substantially improved diabetes control. Ten patients had complete graft loss.

However, only five participants were still insulin independent after two years, and only one after three years.

Source: New England Journal of Medicine



Your Doctor on ENT

Prof Dr M Abdullah
Head, ENT Department
Sir Salimullah Medical College and Mitford Hospital

Dear Doctor,
Are there any over-the-counter medications that can treat acute sinusitis?
Regards
Rakib Hossain
Dhaka

Answer:
No over-the-counter (OTC) medications can cure acute sinusitis. But some OTC medications and other home

remedies may help reduce pain and congestion associated with sinusitis. These remedies include:

- Spraying a saline solution in your nose several times a day to relieve stuffiness
- Inhaling steam from a bowl of hot — not boiling — water several times a day
- Taking over-the-counter pain relievers
- Applying warm compresses to your nose, cheeks and eyes
- Drinking additional fluids

Some doctors also recommend OTC decongestants to relieve congestion associated with sinusitis. But there is little evidence that OTC decongestants are effective in treating acute sinusitis.

Most people with acute sinusitis get better without antibiotics. However, if your symptoms last longer than a few days, consult an ENT specialist.

Send health related queries to Your Doctor, Star Health, The Daily Star, 19, Karwan Bazar, Dhaka 1215 or e-mail your problem to

HEALTH AND SCIENCE BULLETIN

New strategies for treating falciparum malaria in Bangladesh

Malaria is a substantial public health problem in Bangladesh. Up to 400,000 clinical cases and more than 57,000 laboratory confirmed malaria cases with more than 500 deaths per year have been reported from Bangladesh. Thirteen out of the 64 districts in the country are seriously affected by malaria, accounting for about 99 percent of the country's disease burden.

Despite past successes in malaria control, a significant increase in malaria cases and Plasmodium falciparum (one of the species of malaria parasites, that affects the brain) infections has been seen over the years. Particularly the emergence and spread of antimalarial drug resistance and the resulting increase in treatment failures and case fatality rates have turned into a serious problem. The emergence and spread of antimalarial drug resistance and the resulting increase in treatment failures

and case fatality rates due to falciparum malaria have seriously aggravated the malaria problem in Bangladesh.

Two regimens for treatment of malaria were evaluated in two separate studies. Among 63 patients with confirmed falciparum malaria who received quinine, three times daily for three days followed by a single dose of sulfadoxine/ pyrimethamine, 87 percent were cured at 42 days. Among 67 patients who received a combination of artemether and lumefantrine, 94 percent were cured at 42 days.

Both combination regimens were effective in Bangladesh. Efforts to make effective antimalarial drugs widely available is vital for malaria control in Bangladesh.

Source: ICDDR,B

Legend

- High endemic malarious areas
- Low malarious areas

Dark areas indicate high endemic malarious zone. People to visit the area need taking prophylaxis therapy (preventive treatment) as precaution.