

Thalassaemia must be prevented

Premarital screening should be mandatory to prevent the genetic disease

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Thalassaemia is an inherited disorder that is passed down through parents to offspring and results in inappropriate structure or fewer amounts of red blood cell (RBC) in the body. RBC is mandatory to supply oxygen to about 15 trillion cells of the human body. This genetic disorder causes anaemia because of the destruction of the larger amount of RBC and that is why blood transfusion is most of the time mandatory in a regular interval for thalassaemia patients.

Approximately, 1-5% of the world population are carriers of thalassaemia. When two of such thalassaemia carriers marry and plan to have a baby, there is a one-in-four (25%) chance of having a thalassaemia affected child at every conception while a simple blood test for thalassaemia before marriage or before thinking about the baby will help couples to know if they are carriers or not. If both are non-carriers, they need not be worried about it.

RBC consists of two proteins ‘alpha globin’ and ‘beta globin’ and thalassaemia occurs when the genes having defect which controls the production of these proteins. Because these two proteins are controlled by two separate genes, thalassaemia is classified as – alpha thalassaemia and beta thalassaemia. However, by the consideration of the



source of the faulty gene comes; thalassaemia is divided into two categories: thalassaemia major (faulty gene from both parents) and thalassaemia minor (faulty gene from only one parent). However, the minor case remains asymptomatic most of the time.

Maximum children show symptoms within the first two years if they have moderate or severe thalassaemia. To diagnose, a blood test is performed to see the number of RBC and

abnormalities in size or shape. DNA analysis is also performed to look for the mutated genes.

Frequent blood transfusion, chelation therapy (removing excess iron from the blood), stem cell transplant or bone marrow transplant are considered the possible treatments for moderate to severe thalassaemia. Stem cell transplant is the treatment that can cure thalassaemia in some cases. But the problem is that only a small number of people who have severe thalassaemia

can find a good donor match and have the risky procedure.

In Bangladesh, the Bangladesh Thalassaemia Foundation and Dhaka Shishu Hospital Thalassaemia Centre are two thalassaemia dedicated hospitals that can be mentioned among others.

The most important information is that most of the time being a carrier of thalassaemia gene does not show any symptoms and each child of unaffected carrier father

and unaffected carrier mother has a 25% chance of being affected, 50% chance of being an asymptomatic carrier, and 25% chance of being unaffected and not a carrier.

According to a study by the Biomedical Research Foundation (BRF) published in the Orphanet Journal of Rare Diseases found that 67% of 1,578 college students of Bangladesh had never heard about thalassaemia and 39% of college students did not show willingness to donate blood for thalassaemia patients while 6-12% of the total population of Bangladesh are carriers of this disorder causing gene in their body. However, this research also suggests that 88% of students showed a positive response to pre-marital screening to prevent thalassaemia.

So, the government should emphasise on raising awareness of screening programmes to prevent this disorder, because the effective way to prevent thalassaemia is to reduce the birth of carrier offspring.

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HEALTH bulletin



Blood pressure treatment not just for those with high bp

Blood pressure (BP)–lowering treatment is associated with lower risk for cardiovascular (CV) events across a wide range of BP levels and in patients with and without CV disease, according to a meta-analysis in The Lancet.

Researchers examined individual-patient data on some 345,000 adults who were randomised to different BP-lowering or control regimens across nearly 50 trials. Patients’ baseline BP levels varied widely, and those with and without CV disease were included.

The researchers call for a revision of guidelines that use BP level and CV disease status to guide BP-lowering therapy. Rather, they suggest such treatment should be guided by the patient’s absolute CV risk. They write, “By considering antihypertensives as a tool for reducing cardiovascular risk, rather than simply reducing blood pressure, clinicians are no longer required to make decisions according to an arbitrary and confusing classification of hypertension.” The researchers also note that “recommendations that specify ... a floor level for blood pressure reduction are not substantiated by this study.”

These findings have important implications for clinical practice, and suggest that antihypertensive treatment might be considered for any person for whom the absolute risk for a future cardiovascular event is sufficiently high.

Fasting during the COVID-19 pandemic

DR OPURBO CHOWDHURY

Fasting means avoiding food for a particular time. Fasting customs are common in almost all major religions globally. There is fasting in animals too. Observation shows dogs, cats, ants, even yeast sometimes reduce their calorie intake by 40%. Fasting makes some of their physical symptoms go away and live longer.

Ramadan is the ninth month of the Islamic calendar. In this month of fasting, Muslims refrain from any food, drink, even physical pleasure from dawn to evening for a whole month. This Ramadan fast is mandatory for adult Muslims. This year the Ramadan is very different from previous years due to the outbreak of the COVID-19 pandemic.

Due to the new variant of the coronavirus, it is best to break your fast/have iftar at home throughout the month. Iftar parties should not be arranged. Say your prayers at home and do not go to the mosque.

Drink a lot of water after iftar. Dehydration throughout the day weakens the body’s immunity. If the immunity decreases, you can get infected with coronavirus easily, and if you get infected, your body can get worse very quickly. Dehydration reduces lung mucus. Mucus protects the lungs from germ attacks. To reduce the risk of developing COVID-19, adults are advised to drink plenty of fluids and eat a balanced diet. Adequate hydration in the non-fasting hours can keep the body’s first line of defence strong against germs, while following good hygiene practices.

During fasting, the deficiency of various vitamins and some micronutrients increases in the body. That is why keep fresh fruits, nuts, pulses in iftar. Eat vegetables and fish regularly in sehri. It is better to avoid oily food during iftar. Eat a bowl of salad with fresh vegetables instead of eating rice after the prayer.

There should be a balance of energy in the body to prevent diseases. As you are consuming fewer calories during the day, burn the calories by keeping a variety of food at night. If your body is weak, germs will easily control you.



When a person is fasting, autophagy takes place in the cells. It breaks down some cells, recycles different parts of the cell and strengthens them. So fasting can help you in protecting the body. The month of Ramadan is a good time for reflection.

People can think about their diet, lifestyle and mental health to modify or improve their habits, which will eventually help them to improve their overall health. Have a blessed Ramadan.

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GUIDELINE

Wondering about COVID-19 vaccines if you are pregnant?

The Centres for Disease Control and Prevention (CDC), the American College of Obstetricians and Gynecologists (ACOG), and the Society for Maternal-Fetal Medicine (SMFM) agree that the COVID-19 vaccines should be offered to pregnant individuals who are eligible for vaccination. A recent New England Journal of Medicine study of 35,000 pregnant women found no major safety concerns for women or their infants when vaccination occurred in the third trimester.

Many people who are considering a pregnancy soon or in the future wonder if the COVID-19 vaccines affect fertility. However, there is no evidence that they do, according to ACOG and SMFM. While human vaccine trials did not specifically study fertility, no signs of infertility were noted in animal studies.

Once the vaccine is available to you, getting vaccinated prior to pregnancy is a great way to ensure that you and your pregnancy are protected. COVID-19 vaccination for people who are pregnant has potential benefits and raises some as yet unanswered questions. It helps to become as informed as you can when making your decision, but realise that information may be changing rapidly.

Meanwhile, you can stay informed by checking trusted health websites and by talking with your healthcare providers.



বিয়ের আগে পরীক্ষা করলে রক্ত, সন্তান থাকবে থ্যালাসেমিয়া মুক্ত

World Thalassaemia Day observed

May 8 is World Thalassaemia Day - celebrated every year to raise awareness among the people about the prevention of thalassaemia. Bangladesh Thalassaemia Foundation (BTF), Sandhani, Medicine Club and Platform observed the day like every year, says a press release. This year’s theme was “Addressing Health Inequality in Thalassaemia Patients Worldwide.”

Professor Dr Manjur Morshed, Hematology consultant , Asgar Ali Hospital, presented the keynote address at an online seminar organised by the BTF to mark the day.

Honorable Minister for Social Welfare, Nuruzzaman MP said in a message that the Bangladesh government is committed to controlling Thalassaemia, and providing comprehensive financial assistance to help the patients.

Additional Secretary at the Ministry of Social Welfare, Sultana Saida said, “Thalassaemia is included in the government’s policy through the activities of the Bangladesh Thalassaemia Foundation. We help registered patients with a lump sum of Rs 50,000 every year”. She requested Thalassaemia patients to register through the website of Bangladesh Thalassaemia Foundation.

Dr Mostafa Jalal Mohiuddin underscored the importance of preventing the disease through blood tests to diagnose Thalassaemia carriers before marriage and called for greater public awareness and participation in the younger generation.

Special guest on the occasion, Vice President of Thalassaemia International Federation - Shobha Tuli said that thalassaemia patients and their families are victims of social discrimination due to economic inequality. They need to eliminate economic inequality for a better life and future.

Honorable Prime Minister has given a message on the occasion of the day. She emphasised on widespread public awareness and participation of the young generation in this regard. The Prime Minister said this in a message issued on Friday (May 7) on the occasion of World Thalassaemia Day.

1 in 14 people in Bangladesh is a carrier of Thalassaemia. Carriers of Thalassaemia are diagnosed by a blood test called hemoglobin electrophoresis. Thalassaemia has nothing to do with blood group.



Uncovering Asthma Misconceptions

Myth
Asthma is a childhood disease; individuals will grow out of it as they age

Truth
Asthma can occur at any age (in children, adolescents, adults and elderly)

Myth
Asthma is infectious

Truth
Asthma is not infectious. However, viral respiratory infections (such as common cold and the flu) can cause asthma attacks. Or in children, asthma is frequently associated with allergy, but asthma which starts in adulthood is less often allergic

Asthma can not be cured, but it can be managed well

Myth
Asthma sufferers should not exercise

Truth
When asthma is well controlled, asthma subjects are able to exercise and even perform top sport

Myth
Asthma is only controllable with high dose steroids

Truth
Asthma is most often controllable with low dose inhaled steroids

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WORLD ASTHMA DAY
4 May 2021

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