

Rheumatic fever can damage heart if remain untreated

DR MD HABIBE MILLAT

Rheumatic Fever (RF) / Rheumatic Heart Disease (RHD) is a major public health problem. RF/RHD is the most common cardiovascular disease in children and young adults. It is both a biological and a social problem.

What is Rheumatic Heart Disease?

RHD is a condition in which permanent damage to heart valves are caused by RF. The heart valve is damaged by a disease process that generally begins with a sore throat caused by bacteria called streptococcus, and if untreated may eventually cause RF.

Why is Rheumatic Fever a concern?

Rheumatic Fever (RF) can damage body tissue by causing them to swell. More than half of the time, RF leads to scarring of the heart valves. This scarring can narrow the heart valve and make it harder for the valve to open or to close completely. In turn, heart has to work harder to pump blood to the rest of the body. This valve

damage can lead to a condition call RHD, which, in time, can lead to congestive heart failure. RF can continue to cause new problems for as many as 40 or 50 years after initial infection.

What causes RHD?

Rheumatic Fever (RF) causes Rheumatic heart disease. RF is not an infection itself, but rather the result of untreated or inadequately treated infection caused by streptococcus. When the body senses the infection, it sends antibodies to fight it. Sometimes, these antibodies attack the tissues of joints or heart instead. When antibody attacks heart valves, it damages heart valves.

Who is at risk for RF?

It is most common among children aged 5 to 15, but adults may have this condition as well. Immuno-compromised people are also more likely to have RF. According to a study in Bangladesh, peak age period of the incidence of the disease was found in the age group of 11-12 years (34 percent) and majority (83.5 percent) of the cases belonged to the middle and poor

classes. There was slightly higher incidence in male. In Bangladesh the prevalence of the disease was found to be 4 per 1000 children. RF is a systemic illness. However no history of sore throat can be obtained in about 30-50 per cent cases of rheumatic fever patients.

Signs and symptoms of RF

The symptoms of RF usually start about one to six weeks after streptococcal bacterial infection. The following are most common symptoms. However, the symptoms may vary person to person. The symptoms are joint inflammation, small nodules under the skin, red rash on the chest, back or stomach, stomach pain or loss of appetite, uncontrolled movement, weight loss, fever, shortness of breath, fatigue or feeling very tired. Joint inflammation includes swelling, tenderness, and redness over multiple joints. The joints affected are usually the larger joints in the knees and ankles. The inflammation moves from one joint to another over several days. The symptoms of rheumatic fever may resemble

other conditions or medical problems. Always consult a paediatrician for advice.

When to seek medical advice?

If a child (even adult) suffers from a sore throat along with a fever that lasts for more than 24 hours or a severe sore throat without cold symptoms and without much fever. It is especially if he/she has been close to someone with sore throat, consult a physician. Although most of the time sore throat does not lead to rheumatic fever, you can usually prevent RF by using antibiotics to treat sore throat. Also see your doctor if you have recently had a sore throat and high fever and you are experiencing difficulty breathing or chest pain.

Prevention

RF may be prevented by treating sore throat infections, or by identifying strep. infection and treating them quickly with appropriate antibiotics and not let it progress to reference.

Treatment

RF must be treated right away. If you have a sore throat that lasts

longer than 3 days, or if you have a fever and headache along with your sore throat, you should see your doctor. If you do not have a sore throat but have a fever and a skin rash, this could also mean a strep. infection, and you should see the doctor. RF fever can result from an untreated strep. infection, so it is very important to treat the infection before it leads to a worse condition.

Lifestyle changes

If RF has led to rheumatic heart disease or damage to your heart valves, your doctor may recommend that you take antibiotic medicines continuously for many years. In any case, you should always tell your doctor or dentist about your history of RF before you have a surgical or dental procedure. Such procedures may cause bacteria to enter the bloodstream and infect your heart valves.

Medicines

If your doctor tells you that you have strep. infection, he or she will prescribe an antibiotic medicine. It is important that you take the medicine as the doctor tells

you. Do not stop taking the medicine just because you start to feel better. Many people find that they feel better after a couple of days of therapy, so they stop taking their medicine. Even if your sore throat does not come back, without the antibiotics in your bloodstream, the streptococcal bacteria can still multiply and affect your heart and other organs.

Surgical procedures

In some patients, doctor may recommend surgery to repair or replace the damaged heart valve. Amongst RHD in Bangladesh, mitral stenosis (Stenotic valve) and mitral incompetence (Leaky valve) comprised the highest (35 percent) incidence and next to it was the mitral stenosis (13 percent) and mitral incompetence (9 percent). Aortic valve is also involved in minority of cases.

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More than 8 hours sleep too much of a good thing



Although the dangers of too little sleep are widely known, new research suggests that people who sleep too much may also suffer the consequences.

Specifically, investigators at the University of California in San Diego found that people who clock up 9 or 10 hours each weeknight appear to have more trouble falling and staying asleep, as well as a host of other sleep problems, than people who sleep 8 hours a night. People who slept only 7 hours each night also said they had more trouble falling asleep and feeling refreshed after a night's sleep than 8-hour sleepers.

These findings demonstrate that people who want to get a good night's rest may not need to set aside more than 8 hours a night, study author Dr. Daniel Kripke told. He added that "it might be a good idea" for people who sleep more than 8 or 8.5 hours each night to consider reducing the amount of time they spend in bed, but cautioned that more research is needed to confirm this.

Previous studies have shown the potential dangers of chronic shortages of sleep, for instance, one report demonstrated that people who habitually sleep less than 7 hours each night have a higher risk of dying within a fixed period than people who sleep more.

For the current report, Kripke and lead author

Michael Grandner reviewed the responses of 1004 adults to sleep questionnaires, in which participants indicated how much they slept during the week - excluding naps - and whether they experienced any sleep problems.

Sleep problems included waking in the middle of the night, arising early in the morning and being unable to fall back to sleep, and having fatigue interfere with day-to-day functioning.

Kripke and Grandner found that people who slept between 9 and 10 hours each night were more likely to report experiencing each sleep problem than people who slept 8 hours.

Kripke expressed that long sleepers may struggle to get rest at night simply because they spend too much time in bed. As evidence, he added that one way to help insomnia is to spend less time in bed. "It stands to reason that if a person spends too long a time in bed, then they'll spend a higher percentage of time awake," he said.

Alternatively, Kripke suggested that there may be a link between long sleeping and depression, noting that people who are depressed often temporarily feel better after skipping a night of sleep. "It might be that depression is causing the long sleep, it might be that the long sleep is causing the depression," Kripke said.

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Source: Psychosomatic Medicine

Proper sanitation can prevent common infections

Human excreta always contain large numbers of germs, some of which may cause diarrhoea. When people become infected with diseases such as cholera, typhoid and hepatitis A, their excreta will contain large amounts of the germs which cause the disease.

When people defecate in the open, flies will feed on the excreta and can carry small amounts of the excreta away on their bodies and feet. When they touch food, the excreta and the germs in the excreta are passed onto the food, which may later be eaten by another person. Some germs can grow on food and in a few hours their numbers can increase very quickly. Where there are germs there is always a risk of disease.

During the rainy season, excreta may be washed away by rain-water and can run into wells and streams. The germs in the excreta will then be carried into the water which may be used for drinking.

Many common diseases that can give diarrhoea can spread from one person to another when people defecate in the open air. Disposing of excreta safely, isolating excreta from flies and other insects, and preventing faecal contamination of water supplies would greatly reduce the spread of diseases.

In many cultures it is believed that children's faeces are harmless and do not cause disease. This is not true. A child's faeces contain as many germs as an adult's, and it is very important to



Poor sanitation is a major source of infection.

collect and dispose of children's faeces quickly and safely.

The disposal of excreta alone is, however, not enough to control the spread of cholera and other diarrhoeal diseases. Personal hygiene is very important, particularly washing hands after defecation and before eating and cooking.

Wastewater disposal and reuse

Wherever crops are grown, they always need nutrients and water.

Wastewater is often used in agriculture as it contains water, minerals, nutrients and its disposal is often expensive. Where effluent is used for irrigation, good quality water can be reserved exclusively for drinking water. Wastewater can also be used as a fertiliser, thus minimising the need for chemical fertilisers. This reduces costs, energy, expenditure and industrial pollution. Wastewater is also commonly used in aquaculture, or fish farming.

Solid waste disposal

The disposal of refuse can have a significant effect on the health of communities. Where refuse is not disposed of properly, it can lead to pollution of surface water, as rain washes refuse into rivers and streams. There may also be a significant risk of groundwater contamination. Refuse disposed of in storm drains may cause blockages and encourage fly and mosquito breeding. It is therefore very important that household waste is disposed of properly.

It is, however, important that industrial waste is disposed of safely, as it is sometimes toxic and highly dangerous to human health.

Sanitation in public places

Where a large number of people are using one area, such as a bus station or school, especially when they are eating food from the same source, there is a greater risk of the spread of diseases such as cholera, hepatitis A, typhoid and other diarrhoeal diseases.

These places vary in the number of people using them, the amount of time that people spend there and the type of activity that occurs in the area, but all public places need to have adequate sanitation and hygiene facilities.

Responsibility for the provision of sanitation facilities in public places is not always obvious, especially where these are informal gathering places. It is vital,

however, that an agency monitors the sanitation facilities in public places on behalf of the users. Ideally, this should be part of the role of the ministry of health, or its equivalent. Special attention should be paid to the adequacy of facilities, their availability to the public, and the conditions of their operation.

There are several basic rules for sanitation in public places:

- λ There should be sufficient toilet facilities for the maximum number of people using the area during the day. This normally means one toilet compartment for every 25 users. The toilet facilities should be arranged in separate blocks for men and women. The men's toilet block should have urinals and toilet compartments; the women's block, toilet compartments only. The total number of urinals plus compartments in the men's block should equal the total number of compartments in the women's block.
- λ Toilet facilities should not be connected directly to kitchens. This is in order to reduce the number of flies entering the kitchen and to reduce odours reaching the kitchen. It is important that people using the toilet facilities cannot pass directly through the kitchen.
- λ There must be a hand-washing basin with clean water and soap close to the toilet facilities. There should be separate, similar facilities near to kitchens or where food is handled.
- λ There must be a clean and

reliable water supply for hand-washing, personal hygiene and flushing of toilet facilities. The water supply should meet quality standards and be regularly tested to ensure that any contamination is discovered quickly and that appropriate remedial action is taken.

Responsibilities for cleaning sanitation facilities should be very clearly defined. Dirty facilities make it more likely that people will continue to use the facilities badly or not at all. Clean facilities set a good example to users.

It is important to make sure that information about health is available in public places. Such information should be displayed in an eye-catching, simple and accurate way.

Health and hygiene messages may be passed on to the public using such posters in public places. These messages should include the promotion of:

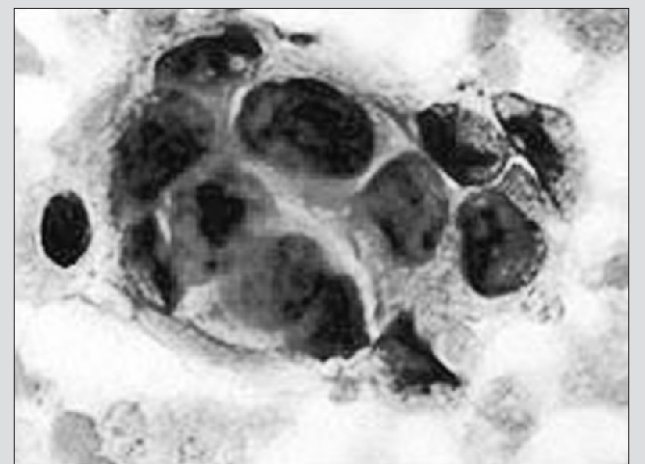
- λ Handwashing
- λ Use of refuse bins
- λ Care of toilet facilities
- λ Protection of water supplies

Local school children and college students can be involved in preparing educational posters and notices for public places.

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Source: <http://www.who.int>

Thyroid gland as a clue of breast cancer

A thyroid problem could help doctors understand how to beat breast cancer



Scientists at the University of Texas have discovered that women with underactive thyroid glands have a lower risk of breast cancer than others.

Thyroid hormones and the female sex hormone oestrogen share similar pathways in the body, say the researchers in the journal Cancer.

The breast cancer drug tamoxifen works by blocking oestrogen. Blocking thyroid hormones may be another way, they say.

Thyroid gland

The thyroid gland sits in the neck and produces hormones to regulate the body's metabolism. If it becomes overactive, called hyperthyroidism, or underactive, called hypothyroidism, the person will feel ill.

A person who is hyperthyroid can experience weight loss, a rapid heartbeat, excessive sweating and anxiety. Conversely, someone who is hypothyroid might gain weight, become constipated and develop a swollen face and puffy eyes.

There has been conflicting views about the effect of thyroid hormones on the breast.

Some studies have linked

high levels of thyroid hormones with breast cancer while others have reported a protective effect.

Dr Massimo Cristofanilli's team compared the medical records from 1,136 women with breast cancer and 1,088 healthy women attending their breast screening clinic in Texas.

Women in the breast cancer group were also 57 per cent less likely to have hypothyroidism than the healthy women.

Dr Cristofanilli said: "It may be possible to design a treatment that specifically and narrowly targets thyroid hormone receptors, which might provide enough influence on the target cells to help prevent breast cancer - perhaps even serving as a complement to tamoxifen."

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Source: <http://news.bbc.co.uk>

New drug launched



Eskayef Bangladesh Ltd. has launched a new drug, Ostocal D in the market for the first time in Bangladesh, says a press release.

Ostocal D is the combination of calcium with vitamin D, while most of the calcium preparation worldwide is available in combination with vitamin D. It is an effective drug against the calcium and vitamin D deficient diseases like Osteoporosis, Osteomalacia, and Rickets. Ostocal D contains calcium and vitamin D in right quantity.

This combination not only meets the need of vitamin D in the body but also acts as calcium regulator by increasing calcium absorption. Twice daily dosing of Ostocal D meets the daily calcium and vitamin D need of the body. Each Ostocal D tablet contains calcium carbonate BP 1250 mg equivalent to 500 mg calcium and vitamin D as cholecalciferol 200 I.U.

Dual strategy for fibroids gives good results

For women with troublesome fibroids, the combination of two approaches results in better improvement than does surgery alone, according to a report from Taiwan.

Surgical removal of the uterine growths -- a procedure known as myomectomy -- is commonly used when a woman does not want a hysterectomy (removal of uterus) because she wishes to preserve her fertility, the authors explain, but blood loss from the operation remains a significant concern.

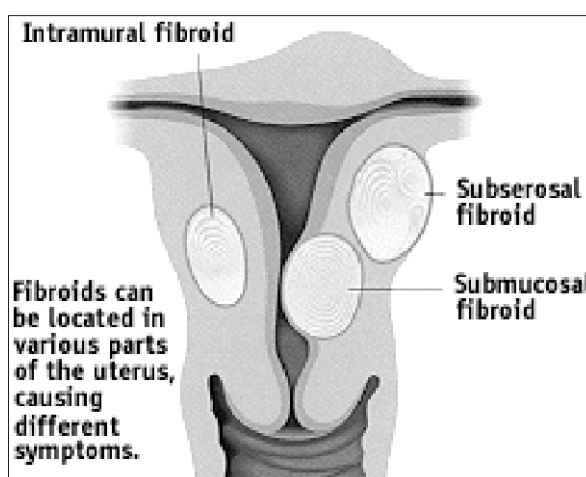
Recently, it has been shown that tying off the uterine arteries supplying blood to the womb restricts the growth of fibroids, Dr.

Wei-Min Liu from Taipei Medical University and colleagues noted.

The team combined the two procedures -- ligation of the uterine arteries and myomectomy -- and compared the outcome of this new procedure with myomectomy only for the treatment of fibroids in 342 women.

Overall, symptoms resolved after surgery for more women treated with the dual procedure (98.7 percent) than those treated with myomectomy alone (81.5 percent).

Among women who had suffered very heavy menstrual bleeding, all those who were treated with the combined procedure



experienced symptom resolution within 2 months after surgery, compared with only 84 percent of women treated with myomectomy

alone. Fibroids recurred in 19.4 percent women who underwent only myomectomy, but there

were no recurrences in the combined treatment group.

Pregnancy and live birth rates after surgery were similar in the two groups.

"Combined uterine depletion procedure and myomectomy for the treatment of symptomatic fibroids is a less invasive procedure that preserves the uterus and can preserve future reproductive capacity," the authors conclude.

However, they added, larger studies are necessary to be sure that this approach does not affect fertility or compromise fetal growth in the womb.

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Source: Fertility and Sterility