

The changing treatment of congestive heart failure

DR FRANK W SELLKE

A malfunctioning mitral heart valve (a valve that lets blood flow from one chamber of the heart, the left atrium, to another called the left ventricle) often causes or greatly contributes to congestive heart failure in patients with heart disease.

There are two basic categories of leaky mitral valves: degenerative (also known as primary) mitral regurgitation (MR), in which the valvular structure is abnormal and blood leaks through the defects; and functional (also known as secondary), in which the valve itself is normal, but the annulus or supporting ring of the valve is dilated or the left ventricle is enlarged and the cords supporting the valve leaflets pull the leaflets down and apart.

In either type of mitral regurgitation, much of the blood that is supposed to go forward goes backward when the left ventricle contracts, causing fluid to build up in the lungs, resulting in shortness of breath and heart failure.

The favoured treatment of primary MR remains repair rather than replacement with an artificial valve, if a well functioning native valve can result from the operation that will maintains adequate function for the long



term. The methods of repair are changing, in that the use of artificial cords are tending to replace the use of leaflet resection and annuloplasty alone. Any of these methods be used to repair the mitral valve and can result in long term success in the elimination of MR.

The surgical treatment of secondary, or functional MR is also controversial and changing. Until recently, the favoured treatment of severe functional mitral regurgitation (MR) was considered to

be annuloplasty repair in nearly all cases, and a mitral valve replacement was reserved only when a repair could not be performed.

However, a randomised trial sponsored by the Cardiothoracic Surgery (CTS) Network of the National Heart, Lung, and Blood Institute of the United States, examined the outcome of mitral repair versus replacement for severe functional MR. There was no difference in death, major adverse cardiovascular events, left

ventricular end systolic volume index or quality of life between groups at two years follow-up.

However, it was found that recurrence of at least moderate to severe MR occurred in one third of patients within one year of surgery and this difference remained at 2 years.

Another area of controversy is the treatment of moderate functional MR in the setting of coronary artery bypass grafting (CABG). However, CABG with mitral repair was associated with

more neurologic events, increased cross clamp and cardiopulmonary bypass time, and longer ICU and hospital lengths of stay.

In addition, minimally access methods with the utilisation of small incisions or a robotic approach are becoming more popular versus the traditional median sternotomy approach.

While methods of surgical repair have improved and surgery can be less invasive with a better cosmetic result, outcomes are generally similar between the different approaches in the hands of skilled cardiac surgeons. Percutaneous approaches to repair and replacement of the mitral valve are currently being developed.

The primary goal of mitral valve surgery should be the short and long term effectiveness, cost, and safety of the procedure. A balanced approach should be taken for the treatment of both degenerative and functional MR, considering long term results of repair versus replacement, costs and risk of complications.

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JOINT PAIN

Take care of your knees

DR MOHAMMAD ALI

Knees are important joints of our body because they bear whole body weight during standing, walking and running. Furthermore, squatting puts pressure on knees which allows us to perform religious prayer like namaz. Healthy knee is always crucial for our daily living.

Along with some bones, knee got a lot of muscle, ligaments and meniscuses. It can move easily on directions, thanks to the lubricant like synovial fluid.

Causes of knee pain: a person who reaches his forty can expect degenerative changes in the bones of knee joint. Synovial fluid might lost its natural viscosity and inflammation could catch the ligaments, meniscus or muscles. One the other hand, body overweight or sports injury could induce knee pain at any age.

Symptoms and signs: patient might feel pain in squatting, starting or even walking and running. There might be some swelling with high temperature. Some patients cannot perform namaz or feel difficulties during sitting on a pan. Thus normal activities become limited.

Solution: infiltration of sodium hyaluronate has the ability to enhance natural viscosity of synovial fluid and could improve knee mobility. Electrotherapy is marvelous for reducing intense pain and inflammation. Therapeutic exercise for knee muscle could increase power and provide stability. However, all are the ingredients of integrated pain management (IPM).

Advice: Ignoring knee pain could make you disable. If you want to move in a perfect way, you must have to take care of your knee.

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HEALTHbulletin



UK soft drinks industry levy estimated to have significant health benefits

Reducing sugar content of high and mid sugar drinks is likely to have the greatest impact on health, with fewer cases of obesity, diabetes and tooth decay.

The UK soft drinks industry levy, due to be introduced in April 2018, is estimated to have significant health benefits, especially among children, according to the first study to estimate its health impact, published in The Lancet Public Health.

The proposed levy relates to the sugar content of drinks: no tax on diet and low sugar drinks; a low tax on mid-sugar drinks (5-8g of sugar per 100ml); and a high tax on high-sugar drinks (over 8g of sugar per 100ml).

The authors estimate that a reduction of 30% in the sugar content of all high-sugar drinks – a step already implemented by some manufacturers – and a 15% reduction in mid-sugar drinks could result in 144000 fewer adults and children with obesity, 19000 fewer cases of type 2 diabetes per year, and 269000 fewer teeth suffering from decay annually. Children are likely to be benefit most.

Almost 20% of breast cancer patients fail to complete prescribed endocrine therapy

STAR HEALTH DESK

Around 20% of breast cancer patients do not complete prescribed endocrine therapy, researchers reported at the ESMO Asia 2016 Congress in Singapore. The study in over 5,500 women found that younger patients and those who had taken hormone replacement therapy (HRT) were less likely to adhere to their medicine.

"Adjuvant endocrine treatment such as tamoxifen prevents recurrence and improves absolute survival by 5-10% in patients with oestrogen receptor (ER) positive breast cancer, especially when taken long term (5-10 years)," said lead author Dr Wahyu Wulaningsih, research associate, MRC Unit for Lifelong Health and Ageing at University College London, UK and co-founder of Philippine and Indonesian Scholars (PILAR) Research and Education.

"A substantial proportion of patients who start this treatment do not complete it," continued Wulaningsih. "There is evidence that failure to take the medicine could lead to worse survival. We therefore investigated the reasons for non-adherence so that targeted

strategies could be developed."

The study included 5,544 women with ER positive breast cancer who collected at least one prescription of aromatase inhibitors or tamoxifen and had five years of follow up data.

Wulaningsih said: "A proportion of breast cancer patients of reproductive age may be concerned about the potential impact of endocrine treatment on fertility which could explain why they are more likely to stop taking the drugs. Women who wish to have children after a breast cancer diagnosis need more information about their treatment options."

"Research is needed to find out if there are any biological differences in women exposed to HRT before undergoing endocrine treatment for breast cancer," continued Wulaningsih. "It could be that they are more predisposed to side effects from endocrine treatment. Personalised approaches may improve adherence in these patients by, for example, tailoring the dosage."

Wulaningsih speculated that unmarried patients might have less social and emotional support to continue taking endocrine therapy.

She said: "Our study identified subgroups of patients who can be targeted with information on the benefits and consequences of endocrine treatment when it is first prescribed and at subsequent visits. Patient support groups could be strengthened, or developed, to help patients overcome the barriers to continuing treatment. Improving adherence should lead to better outcomes for these patients."

Commenting on the findings, Dr Lim Siew Eng, senior consultant, Department of Haematology-Oncology, National University Cancer Institute, Singapore (NCIS), said: "Nonadherence to oral endocrine therapy is associated with higher recurrence rates, and is the most important modifiable risk factor that can affect breast cancer outcomes."

She continued: "In this large study, mainly socioeconomic factors and not disease nor treatment factors were identified as risks for nonadherence. Pre-diagnostic use of HRT was also identified. These risk factors could pinpoint certain groups in which stricter compliance monitoring and better management of side effects might improve adherence rates."



Youth summit on UHC Day held in Bangladesh

STAR HEALTH REPORT

On the third annual Universal Health Coverage (UHC) Day on 12 December 2016, first of its kind Youth Summit on the issue was held in Dhaka, Bangladesh.

SERAC-Bangladesh organised the summit in association with USAID, EngenderHealth, Bondhu, Sharenet Bangladesh and Universal Health Coverage Coalition. During the day-long summit, more than 150 participants attended from all over the country.

Experts prioritised on young people to be effectively engaged and informed to reach health targets for the country. With deliberate participation, young people raised health issues faced by them and emphasised how to improve the quality of healthcare making it more youth friendly, ensuring access to quality medicines, and interventions to include families and educational institutions to make comprehensive sexuality education more accessible for youths.

They also raised voices to include health as a fundamental human right in the Bangladesh constitution.



/StarHealthBD

Best Foods for Your Anti-Aging Diet

Water: Not a food, you say? Think of it as one. Many older people simply don't drink enough water because they don't feel as thirsty as they used to. "Water is so underappreciated. Our bodies are mostly water. If you're chronically dehydrated, just think of what your cells look like," says Robin Foroutan, a New York nutritionist. "You can't think as clearly, you get fatigued more easily, you don't tolerate heat as well

Fiber: Dietary fiber -- from things like vegetables, whole grains, fruits, and legumes -- helps regulate your digestive system. That can help ease constipation, which is an issue for many older people. It can lower your cholesterol, blood pressure, and inflammation. That can lead to a healthier heart

Salmon: A heart-healthy all-star, salmon (and other fatty fish like mackerel and sardines) are high in omega-3 fatty acids. They help prevent heart disease and stroke. Try to get at least two servings a week.

Olive oil: A 2013 study showed a "significant" drop in "bad" cholesterol (LDL) and an increase in "good" cholesterol (HDL) among those given extra virgin olive oil. The experiment concluded that it helps increase your amount of the antioxidants we mentioned earlier



Blueberries: "Always delicious," says Angel Planells, a nutritionist in Seattle, "and packed with various antioxidants." Antioxidants are things, like vitamin C or vitamin E, that can prevent or minimize damage to your cells

Yogurt: Bone loss gets worse as you get older. Calcium helps keep it to a minimum, and yogurt is a good source of it. Get yogurt fortified with vitamin D, which aids in the absorption of that key mineral. Yogurt also helps you digest your food, and it has protein, too. And add some fruit, Planells says

Tomatoes: Foods high in lycopene, like tomatoes, can help protect you against prostate cancer and may help prevent lung cancer, too. Cooked or processed tomatoes (like in juice, paste, and sauce) may be more effective than raw ones. Researchers believe that heating or mashing tomatoes releases more of the fruit's lycopene

Broccoli: Filled with all sorts of vitamins and antioxidants, broccoli is high in fiber, too. It should be in everyone's kitchen, Planells says.

Nuts: Omega-3s, unsaturated fats (that's the good kind), fiber, protein ... nuts are heart-healthy nutrition in the palm of your hand. Shoot for five, 1-ounce servings per week

