# Heart valve repair without an open heart surgery

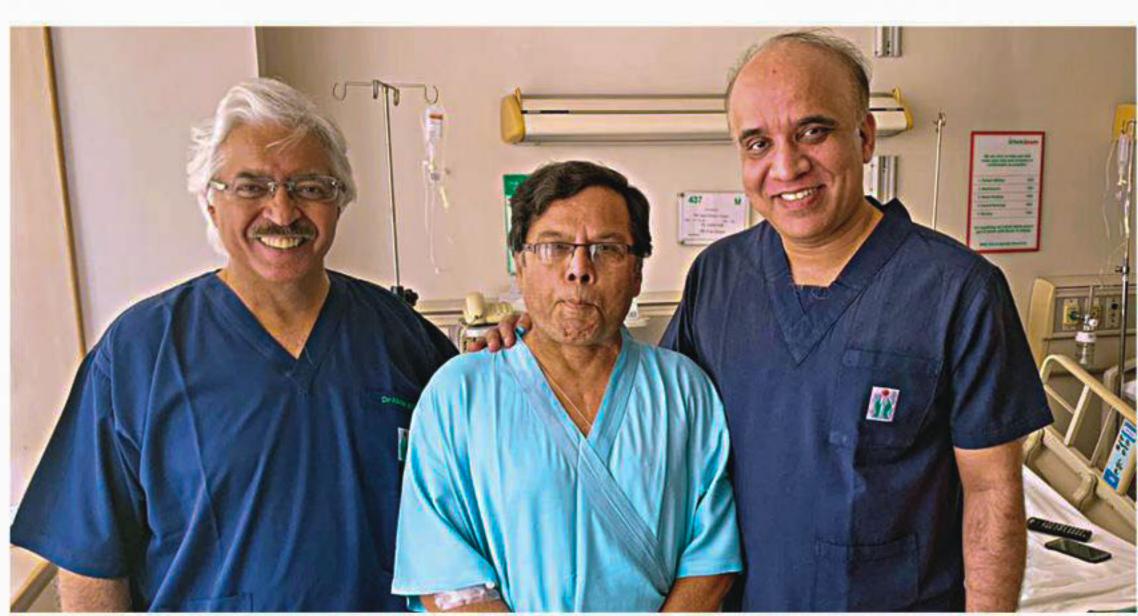
Surgery performed through catheter-based procedure of MitraClip; A 69 year old, suffering from a severely leaking valve leading to breathlessness and heart failure becomes the first person in India to get operated through MitraClip

STAR HEALTH REPORT

For the first time in India, a team of doctors led by Dr Ashok Seth successfully performed the catheter-based procedure of MitraClip to repair a leaking heart valve without surgery in a 69-years-old gentleman who was suffering from repeated heart failure and in whom open heart surgery was not possible, says a press release. The patient had previous bypass surgery 13 years ago and more recently his heart was getting enlarged due to a severely leaking valve leading to breathlessness and heart failure.

Till now, open heart surgery with repair or replacement of the valve had been the only possible treatment for such patients in India, but it is often high risk and may not be beneficial. Similar was the case in this patient and so he underwent the MitraClip procedure successfully.

Dr Ashok Seth, Chairman, Fortis Escorts Heart Institute said, "The MitraClip is a novel catheterbased non-surgical repair of the



Dr Ashok Seth (left) with the patient along with another physician

mitral valve inside the heart and is performed in the Cath Lab like angioplasty. Special catheters are inserted through the large vein in the groin and the catheter is passed from the right chamber of the heart to the left chamber of the heart by puncturing the parti-

tion called interatrial septum. Then under echocardiography and X-ray guidance, a clip is put on the leaking mitral valve to decrease the leak which improves the condition of the patient. The patient is normally ready to be discharged in 24-48 hours time."

PHOTO: COURTESY

Recently the COAPT trial, published in the New England Journal of Medicine, demonstrated the benefits of MitraClip procedure not only in improving the wellbeing and symptoms of the patient but also improving the survival of patient over 2 years.

With the introduction of MitraClip to India, they hope to benefit a number of patients who are gradually deteriorating from leaking valves, despite medications and are unsuitable for valve replacement surgery.

MitraClip mitral valve repair without open-heart surgery is one of the innovative scientific advancements of recent times. A few years ago, it was unbelievable to think that a valve which lies within the heart could be repaired by catheters, in an angioplastylike procedure without opening the heart and putting the patient on cardiopulmonary bypass.

A leaking mitral valve affects nearly 10% of the population who have coronary artery disease, heart attacks or bypass surgery and continues to increase with age. The continuously leaking valves put pressure on the heart causing breathlessness. If left untreated, it leads to enlargement of the heart, heart failure, and death. These patients are either at a high risk for valve surgery or do not benefit from it.

#### ORGAN TRANSPLANT

### First baby born via uterus transplant

The first baby has been born following a uterus transplantation from a deceased donor, according to a case study from Brazil published in The Lancet.

The new findings demonstrate that uterus transplants from deceased donors are feasible and may open access for all women with uterine infertility, without the need for live donors. However, the outcomes and effects of donations from live and deceased donors are yet to be compared, and the surgical and immunosuppression techniques will be optimised in the future.

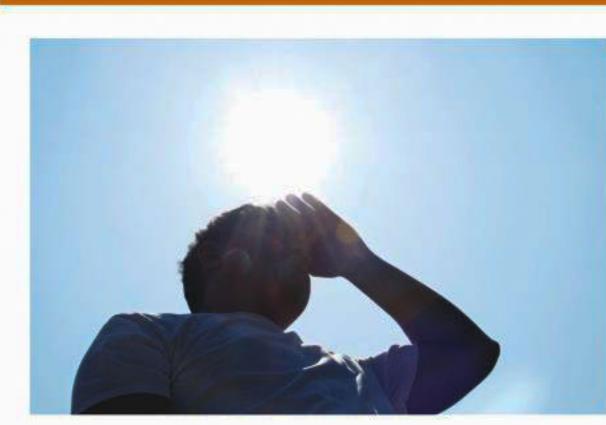
"The use of deceased donors could greatly broaden access to this treatment, and our results provide proof-of-concept for a new option for women with uterine infertility," says Dr Dani Ejzenberg, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo, who led the research.

The baby girl was born via caesarean section at 35 weeks and three days and weighed 2550g. The transplanted uterus was removed during the caesarean section and showed no anomalies.



Brazilian doctors delivered the world's first baby born using a uterus transplant from a dead donor.

# HEALT Hulletin



#### Proportion of population vulnerable to heat exposure is rising globally

The proportion of the global population vulnerable to heat-related death and disease is growing as a result of climate change's effects on growing populations of older people, people living in cities, and people with non-communicable diseases (NCDs), according to the 2018 report of The Lancet Countdown on Health and Climate Change.

The rising vulnerability to the heat-related risks of climate change is mirrored by increased exposure to higher temperatures. Despite a mean global temperature increase of 0.3°C between 1986 and 2017, the average temperature increase people were exposed to was more than double this (0.8°C).

With the pace of climate change outweighing the urgency of the response, the report provides cause for concern. However, the authors also note promising trends in key areas for health, including the phase-out of coal, the deployment of healthier, cleaner modes of transport, and health system adaptation. In 2017, over 157 million vulnerable people over the age of 65 were exposed to heatwaves compared to the study's baseline, and 18 million more people compared to 2016.

# Health benefits far outweigh the costs of meeting climate change goals

STAR HEALTH DESK

Meeting the goals of the Paris Agreement could save about a million lives a year worldwide by 2050 through reductions in air pollution alone. The latest estimates from leading experts also indicate that the value of health gains from climate action would be approximately double the cost of mitigation policies at the global level, and the benefitto-cost ratio is even higher in countries such as China and India.

A report launched recently by the World Health Organisation (WHO) at the United Nations Climate Change Conference (COP24) in Katowice, Poland highlights why health considerations are critical to the advancement of climate action and outline key recommendations for policymakers.

Exposure to air pollution causes 7 million deaths worldwide every year and costs an estimated US\$ 5.11 trillion in welfare losses globally. In the 15 countries that emit the most greenhouse gas emissions, the health impacts of air pollution are estimated to cost more than 4% of their GDP. Actions to meet the Paris goals would cost around 1% of global GDP.

The same human activities that are destabilising the Earth's climate also contribute directly to poor

health. The main driver of climate change is fossil fuel combustion which is also a major contributor to air pollution.

"The true cost of climate change is felt in our hospitals and in our lungs. The health burden of polluting energy sources is now so high, that moving to cleaner and more sustainable choices for energy supply, transport, and food systems effectively pays for itself," says Dr Maria Neira, WHO Director of Public Health, Environmental and Social Determinants of Health. "When health is taken into account, climate change mitigation is an

opportunity, not a cost."

Switching to low-carbon energy sources will not only improve air quality but provide additional opportunities for immediate health benefits. For example, introducing active transport options such as cycling will help increase physical activity that can help prevent diseases like diabetes, cancer and heart disease.

WHO's COP-24 Special Report: health and climate change provides recommendations for governments on how to maximise the health benefits of tackling climate change and avoid the worst health impacts of this global challenge.



#### Benefits of dietary fibre in daily meal

DR GOLAM NABI

Eat more fibre. You have probably heard it before. But do you know why fiber is so good for your health?

Normalises bowel movement: Dietary fibre increases the weight and size of your stool and softens it. A bulky stool is easier to pass, decreasing your chance of constipation. If you have loose, watery stools, fibre may help to solidify the stool because it absorbs water and adds bulk to stool.

Helps maintain bowel health: A high fibre diet may lower your risk of developing anal fissure, haemorrhoids and small pouches in your colon. A high fibre diet likely lowers the risk of colorectal cancer.

Lowers cholesterol levels: Soluble fibre found in beans, oats, flaxseed and oat bran may help lower total blood cholesterol levels by lowering low-density lipoprotein, or 'bad' cholesterol levels. Studies also have shown that high fibre foods may have other heart health benefits, such as reducing blood pressure and inflammation.

Helps control blood sugar levels: In people with diabetes, fibre - particularly soluble fibre can slow the absorption of sugar and help improve blood sugar levels. A healthy diet that includes insoluble fibre may also reduce the risk of developing type 2 diabetes.

Aids in achieving healthy weight: High-fibre foods tend to be more filling than low-fibre foods, so you are likely to eat less and stay satisfied longer. High-fibre foods tend to take longer to eat and to be less 'energy dense', which means they have fewer calories for the same volume of food.

Helps you live longer: Studies suggest that increasing your dietary fibre intake - especially cereal fibre is associated with a reduced risk of dying from cardiovascular disease and all cancers.

The writer is an Assistant Professor of Medicine at Z H Sikder Women's Medical College and Hospital, Dhaka.





## Orion Pharma Scholarship **Medical Student**

### ডাক্তারবিহীন একটি সুস্থ্য, সুন্দর এবং সাবলীল সমাজ কি চিন্ডা করা যায় 🥇

ডাক্তার হওয়ার স্বপ্ন অনেকেরই, কিন্তু অনেক সময় শুধু আর্থিক সংকটের কারণে আজন্ম লাালিত স্বপ্ন স্লান হয়ে যায় । সেই সব স্বপুবান, সম্ভাবনাময় মেধাবী শিক্ষার্থীদের লক্ষ্য অর্জনের সহযোগিতার জন্য ওরিয়ন ফার্মা ওয়েলফেয়ার ট্রাষ্টের সময়োপযোগী উদ্দ্যোগ "ওরিয়ন ফার্মা মেডিকেল স্কলারশীপ"।

#### যারা আবেদন করতে পারবেন

সকল সরকারী মেডিকেল কলেজে সদ্য ভর্তিকৃত ১ম বর্ষের অসচ্ছল ও মেধাবী শিক্ষার্থী

#### ৩১ জানুয়ারি ২০১৯-এর মধ্যে

আবেদনপত্রটি ওরিয়ন ফার্মার ওয়েব সাইট থেকে সংগ্রহ করে যথাযথভাবে পূরন করে প্রয়োজনীয় তথ্যাবলীসহ নিচের ঠিকানায় পাঠিয়ে দিন:

মেডিকেল সার্ভিসেস ডিপার্টমেন্ট ওরিয়ন ফার্মা ওয়েলফেয়ার ট্রাস্ট

ওরিয়ন হাউজ, ১৫৩-১৫৪, তেজগাঁও শিল্প এলাকা, ঢাকা-১২০৮।

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#### প্রয়োজনীয় তথ্যাবলী

- 🕐 নিজ মেডিকেল কলেজের অধ্যক্ষের প্রত্যয়নপত্র, পূরণকৃত আবেদনপত্র, জাতীয় পরিচয় পত্র/ স্মাট কার্ড এর
- Ø অভিভাবকের বাৎসরিক আয়ের সনদপত্র (ওয়ার্ড কমিশনার/ ইউপি চেয়ারম্যান/ নিয়োগদাতা প্রতিষ্ঠান কর্তৃক সত্যায়িত), ২ কপি পাসপোর্ট সাইজের সত্যায়িত ছবি
- 🕜 সকল শিক্ষাগত যোগ্যতার সনদপত্র এবং নম্বরপত্রের সত্যায়িত ফটোকপি
- 🕐 নিজ মেডিকেল কলেজ থেকে রেজিষ্ট্রেশনের সত্যায়িত ফটোকপি

