

The bitter pill

A WHO report shows the incidence of diabetes worldwide is set to increase geometrically:

1995—124.7 million affected

2000—153.9 million affected

2025—299.1 million affected (projected)

Developing countries will see an increase in the number of diabetics by 200 per cent

Urban-rural diabetics ratio in India is

70:30. India is home to about 50 million

diabetics, of whom 1 per cent suffer from type 1 diabetes

The Drug Controller General of India has proposed the banning of anti-diabetic drug rosiglitazone, after the FDA restricted its use following study reports of increased cardiovascular risk. Traditional diabetic medication metformin remains the first-line drug, with minimal side-effects. Sulfonylureas which increase insulin production, GLP-1 agonists, DPP-4 inhibitors and alpha-glucosidase inhibitors are more recent

Hopeful hearts

Dissolving stents, robotic surgeries... cardiologists brace themselves for action

By Jisha Krishnan

My heart procedure went off perfectly. It is like having a brand new ticker," Elizabeth Taylor, 77, tweeted recently. The Hollywood actor had got a MitraClip, the little "miracle device" that fixes leaky heart valves.

Cardiologists are hopeful that the device, accessed to the mitral valve through the femoral vein in the groin, will save millions from the risk of open-heart surgery. The device is commercially available in Europe. In May, Sanjay Duggar of Kolkata became the first Indian to get a MitraClip implanted. He was operated upon in Hamburg, Germany, by Dr P.K. Hazra of AMRI Hospital, Kolkata. Permission has been sought to bring the technology to India.

Taylor made a brave decision. It is not easy to go in for a novel treatment, of which little is known, says Mumtaz Sayed. The 63-year-old homemaker from Mumbai lived through days of agony, before deciding to place complete faith in her doctor.

Mumtaz underwent bypass surgery in 1999 and angioplasty in 2008 and was diagnosed with a severely blocked valve earlier this year. "There were too many risks associated with a second open-heart surgery. My doctor suggested Transcatheter Aortic Valve Implantation (TAVI). The only problem was that the procedure isn't done in India yet," she says.

That didn't deter Dr Shahid



Cut it out: Dr Pradeep Chowbey in the operation theatre. Doctors say Roux-en-Y Gastric Bypass has 82 per cent success rate in early diabetes

time glucose levels.

Diagnosing and managing the associated complications of diabetes have also become easier. One common complication is of the foot. Now, software, which can detect abnormal pressure zones in the foot, helps modify the patients' shoes to control the pressure. Doctors say the high pressure areas in the foot are likely to develop ulcers. Also, Magnetic Resonance Imaging angiography of the foot will delineate the exact anatomy of the foot arteries and detect blockages in circulation. This can also be used to detect deep bone infections in diabetics. CT angiography will help tailor cardiovascular therapies for diabetics.

New drugs have revolutionised treatment of type 1 diabetes. DPP-4

inhibitors (saxagliptin and sitagliptin) and injectable GLP-1 agonists (exenatide and liraglutide) increase incretin hormones, thereby increasing insulin secretion. Newer insulins that are absorbed faster and work longer—up to 24 hours—have also been launched. "There is more in the pipeline," says Dr Anoop Misra, director and head, department of diabetes and metabolic diseases at Fortis Hospital, Delhi. "We are looking forward to oral and inhaled insulin, and the insulin dermal patch." Islets of Langerhans, in the pancreas, where insulin and glucagon are secreted, can now be transplanted. Research on artificial pancreas will also bring cheer to the millions of Indians looking to put some sugar in their cuppa. ■