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Now, pacemaker that is MRI-compatible

Negates Heart Attack Risk During Scan

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New Delhi: A cardiac patient with a pacemaker implanted inside his chest can now finally undergo an MRI scan. The world's first MRI-compatible pacemaker has now been used on Indian patients.

Four hospitals in India — Max (New Delhi), Apollo (Madurai), B M Birla (Kolkata) and SGPGI (Lucknow)—have successfully implanted the MRI-compatible pacemaker on cardiac patients over the last two weeks.

Until now, patients with a pacemaker—three million at present—are barred from undergoing MRI scans.

Current pacemaker designs include a metal wire that connects the gadget to the heart. During an MRI, the wire can get hot, seriously affecting

KEEPING PACE

- A pacemaker is a device placed inside the chest to help control abnormal heartbeat. It uses electrical pulses to make the heart beat at a normal rate

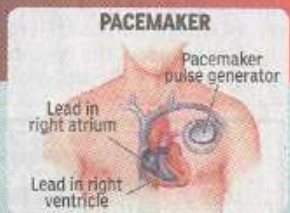
- Nearly 10 lakh pacemakers are implanted in patients worldwide annually. Around 30,000 are implanted in India

- MRI is an imaging technology of choice for neurological (brain), musculoskeletal, cardiovascular and oncological (cancer) imaging

- Current pacemaker design includes a metal wire that connects the device to the heart. During an MRI, the wire can get hot, which can affect the blood vessels, scar the

blood vessels and potentially inducing a rapid heart condition, which can prove fatal.

“The MRI-compatible pacemaker called EnRhythm MRI SureScan Pacing system will be a boon for all patients with



PACEMAKER

- The new pacemaker has a reduced metal wire diameter and reduced tightness of the coil, which minimises the conduction of magnetic signal to the heart tissue

- It also has a changed input filter which regulates unwanted electrical or magnetic signals coming into the pacemaker. All ferromagnetic components have been changed

a pacemaker, especially those who are old,” Dr Praveen Chandra, cardiologist from Max Hospital told TOI. The MRI-compatible machine costs just Rs 30,000 more than the present day pacemakers.