

THE WEEK

SEPTEMBER 2016 • ₹50

SMART *life*

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LOSS
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BODY IS BOSS

CELEB
FITNESS
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SCULPTORS OF
BOLLYWOOD

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FLAB

TWIRL & TONE

BHUTAN
TRADITION OF
HAPPINESS

MOUNI ROY
Creative challenges



For hips that lie

Hip preservation is a better alternative to the more complex hip replacement

BY SUJA NATARAJAN

Eighteen-year-old Mohan of New Delhi often experienced excruciating leg spasms. The painful condition had him bed-ridden, forcing him to forgo his studies. After a slew of tests, he was diagnosed with fractures in both hip joints. He suffered from severe osteopenia, a condition that results in loss of bone mineral density and is often a precursor to osteoporosis. Most doctors suggested hip replacement surgery. Owing to his age, he and his family were not ready for an extensive surgery and sought more opinion. Eventually he underwent hip

preservation surgery in December 2014, by Dr Manoj Padman at Fortis Memorial Research Institute, Gurgaon. He recovered in three months and completed his schooling and takes part in most activities.

The number of adolescents suffering from hip joint pain is increasing. Hip preservation surgery, practically unheard of a decade ago, comes as a tremendous relief.

Causes and symptoms of hip pain

When the cartilage that cushions the joints degenerates, the bones tend to rub against each other, causing pain. Hips can also hurt

when there is tissue inflammation caused by overuse of the joint. Hip injuries like a dislocation, fracture, and diseases that affect the joint, muscles and bones can be causes of hip pain.

"The most common symptom is the pain in the joint. The patient often complains of 'groin pain' rather than hip pain. This pain may worsen with certain movements or activities like squatting, sitting cross-legged, pivoting, running or jumping," says Dr Pranjal Kodkani, special consultant and joint preservation surgeon, Bombay Hospital. "As the condition aggravates, the pain may be associated with a limp or a clicking in the joint. Limited motion in the joint may also signal a deteriorating condition."

Emerging trend

As a minimally invasive procedure with a brief rehabilitation period, hip arthroscopy is one of the most rapidly evolving orthopaedic techniques. It can successfully treat conditions that were previously treatable only by open surgeries. "The trend is gaining ground the world over, due to the patient's difficulty to carry on all activities with functional limitation and having to wait until they are old enough

to go through a hip replacement," says Manoj Padman, senior consultant paediatric orthopaedics, Fortis Bone and Joint Institute, Gurgaon.

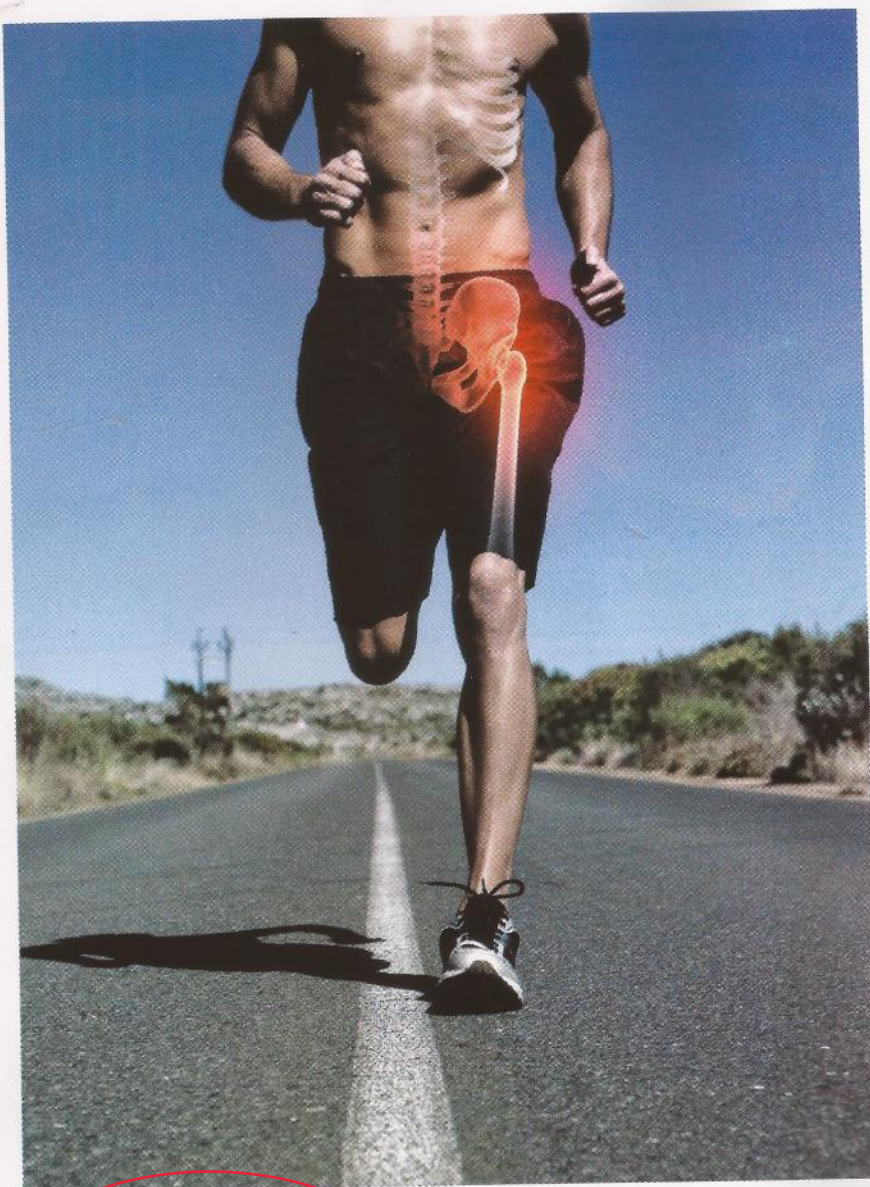
He also cautions that this is not an alternative treatment for hip arthritis when a hip replacement is the only option for pain relief. The arthroscopic (keyhole) hip procedure works best only in the early stages of hip arthritis.

Hip arthroscopy vs Hip replacement

Hip arthroscopy helps delay or sometimes eliminate complex reconstructive hip procedures. "A hip replacement surgery is in absolute contrast to hip preservation. In a hip replacement surgery, the natural bone and cartilage components at the joint are removed and substituted with plastic and metal components. This is a non-reversible procedure," explains Pranjal. "Hip preservation surgeries are specialised procedures performed on the hip joint to relieve its abnormal symptoms and restore its normal function."

Treatable conditions

A variety of hip conditions, like hip dysplasia, Perthes' disease and slipped



capital femoral epiphysis, can lead to early arthritis if not detected and treated during late childhood and adolescence," says Manoj. Hip joint preservation is suitable for sports injuries, avascular necrosis (AVN) of the femoral head, labral tears, femoro acetabular impingement (FAI), cartilage injuries and infections. It also benefits inflammatory conditions (rheumatoid arthritis, tuberculosis, etc), early stages of arthritis, loose bodies in the joint, snapping hip and other conditions related to the muscle and tendon units around the joint," says Pranjal.

Hip arthroscopy benefits

Hip arthroscopy has significant advantages over an extensive open-surgical procedure, to handle hip problems. "The stem cell therapy of the hip is an interventional procedure that preserves the original joint without the use of the knife. There is not much pain and recuperation is faster, and there is no risk of infection. It is also cost effective," says Dr A.K. Venkatachalam, a consultant orthopaedic surgeon.

Procedure

Hip preservation surgery involves several techniques for treatment that includes tissue repairs, joint reshaping

Hip care

- The more you weigh, the more the pressure on the joints, leading to joint damage. Losing weight helps keep osteoarthritis at bay.
- Osteoporosis, a condition of weakened bones due to loss of calcium, could lead to hip fracture. Eat calcium-rich food to maintain bone strength.
- Consider gentle exercises like cycling, swimming, squats, lateral and rotational lunges, step-ups and gentle stretches to boost hip strength.
- If you are an athlete or have a family history of arthritis, you should recognise the warning signs and seek medical help early.
- Take measures to prevent exercise injuries and tend to them immediately. Follow proper exercise routine.
- Warm up and cool down with gentle stretches before workout. Stop exercising when you experience pain. Don't push yourself. Use well-fitting shoes to reduce the pressure on the hips and joint.
- If you sleep on the side, use a pillow between your knees and hip for better alignment of hips and spine.
- Don't use your foot to push heavy things as it may damage your hip bone.

and structural orientation to keep the hip functional. Common procedures include hip arthroscopy, stem cell therapy, and mini-open hip reconstruction.

"Combination of techniques, either open or arthroscopic are used to reshape, realign and correct any deformities, so that the hip can move through a full arc of motion without any pain," says Manoj. During a key-hole arthroscopy, the surgeon makes small incisions using specialised instruments like an arthroscope and a camera lens, which provides magnified information of the joint structure. The surgeon then assesses the condition of the joint and repairs the damage.



Food for strengthening bones

- Dairy products like cheese, milk, and yoghurt increase bone density.
- Add servings of leafy greens and calcium-rich vegetables like cauliflower, broccoli, kale and spinach to your diet.
- Feed your body with adequate vitamin D that will help absorb calcium. Exposure to sun and food like tuna, salmon, orange juice, soya milk, egg yolk are rich sources of Vitamin D
- Walnuts, flaxseed oil and olive oil decrease the rate of bone breakdown.
- Avoid packaged, fast food and fried food.

Hip stem cell injections are also used as a non-surgical option to provide relief from pain. The procedure uses stem cells from bone marrow to heal the injured area. "Stem cells are often judiciously used in joint preservation surgery. A concentrated form of these cells, which have the capacity to mature into different types of adult cells help in repair and restoration," says Pranjal.

Stem cell procedures are typically for outpatients, where the patient can resume low-impact activities immediately. Stem cell therapy is appropriate for patients suffering from hip arthritis, avascular necrosis, osteonecrosis, hip bursitis or other degenerative hip conditions.

Recuperation

"Injection procedures are carried out as outpatient procedures in the clinic. Arthroscopic procedures are day-care procedures, which may not require hospitalisation. Open and mini-open surgical procedures require approximately

three days of hospitalisation," says Pranjal. "Hip stem cell therapy does not need follow-up medicines, but needs follow-up X-rays and clinical observation," says Venkatachalam. "Recovery can take anywhere between six weeks to three months, with most people back to doing all activities in three to six months. Keyhole surgical techniques have a shorter recovery," says Manoj.

Cost

"Hip stem cell procedures cost around Rs2.35 lakh to Rs2.68 lakh in India," says Venkatachalam. "The cost is much lesser than a hip replacement surgery. Depending on the surgical technique used, the costs can be up to Rs2 lakh to Rs2.5 lakh, whereas a hip replacement will cost around Rs3 lakh," says Manoj.

Risks

The risk factors are minimal with hip arthroscopy. "Standard risks of surgery remain. The patient and family are made aware that they may still need a

replacement at a much later age," says Manoj. "Injections and arthroscopic procedures are known to have the most minimal risk factor for side effects/complications, as compared to any other open surgical procedure," says Pranjal. "For stem cell therapy, a patient should be evaluated for any risk of bleeding as it is a needle-based procedure," says Venkatachalam. "They should avoid a few medicines, follow certain diet and medicines." □