

## HEALTHY BACKS AND JOINTS | SURGERY

## Is artificial disc replacement right for you?

By **MARY JACOBS**  
Special Contributor

Before she opted for artificial disc replacement surgery, at least three people tried to talk Maryam Houston out of the procedure, including one of the surgeons she consulted. "He told me, 'I don't trust the technology, it hasn't been around long enough,'" she recalls.

Houston, 28, of Frisco is glad she didn't listen. After months of enduring debilitating back

pain due to a ruptured disc, she opted for artificial disc replacement surgery in 2008 at the Texas Back Institute in Plano. "I did the classic nerd thing: a cost-benefit analysis," says

Houston, who works in financial services. It's a relatively new procedure, approved by the Food and Drug Administration in 2004, and after weighing the options, she felt that disc replacement offered the best chance for staying active. "I still wanted to be able to

run, snowboard and have more children," she says. Today she's running, doing yoga and keeping up with two small children; her second child was born in 2009, after a pain-free pregnancy.

Add artificial disc replacement to hip and knee replacement in the lineup of bionic parts growing in popularity, thanks in part to the aging-but-active baby boomers. Analysts expect the market for this surgery will increase 44 percent between 2007 and 2013.

Discs are the spongy bands of cartilage that act as shock absorbers between the vertebrae, the column of bones that make up the spine. These discs become dry and less flexible with aging. Injury or accumulated wear and tear can damage a disc, causing it to bulge or break open. That puts pressure on the nerves and often leads to pain.

Artificial disc replacement involves removing the disc that's causing problems and replacing it with a device made in knee and hip surgery and designed to simulate spinal function.

Houston's pain was debilitating, but she was adamant about avoiding spinal fusion, traditionally the treatment of choice for patients who can't get relief through nonsurgical choices. She feared that fusion surgery would reduce her mobility and flexibility and lead to additional surgery later.

Spinal fusion involves a bone graft to immobilize a painful segment of vertebrae and tends to cause more wear on the discs adjacent to the surgery. Many patients who have had spinal fusion — some estimates run as high as 30 percent — will need additional surgery within 10 to 15 years. So far, the data on

**Before**  
**Maryam Houston's** back surgery, she was unable to exercise or to lift her children, Sawyer and Emma Grace. Now she stays active and practices yoga in her Frisco home.



Mona Reeder/Staff Photographer

artificial disc replacement is promising better results, according to Dr. Jack Ziegler, who performed Houston's surgery at Texas Back Institute.

"Within the years we've followed people who've had the surgery thus far, the re-operation rate is lower for the disc replacement surgery compared to spinal fusion," he says.

One of Ziegler's colleagues, Dr. Scott Blumenthal, performed the first artificial disc replacement surgery in the United States in 2000 at the Texas Back Institute, which still tracks data on the procedure for the FDA. Surgeons in the practice have performed the surgery more than 1,500 times since 2000.

Other advantages of the disc replacement surgery over fusion: a shorter recovery time —

typically a hospital stay of only one to two days — and less blood loss.

### Not for everyone

Not all orthopedic surgeons, however, are ready to declare disc replacement surgery as the clear winner, according to Dr. Melanie B. Kinchen, a surgeon with North Texas Orthopedics in Grapevine.

Artificial disc replacement surgery is a good option for people who fit the criteria, she says, but those criteria are fairly narrow: for patients whose pain is clearly caused by only one or two discs in the spine, who have no leg pain, no spinal stenosis, no facet joint disease and no significant arthritis.

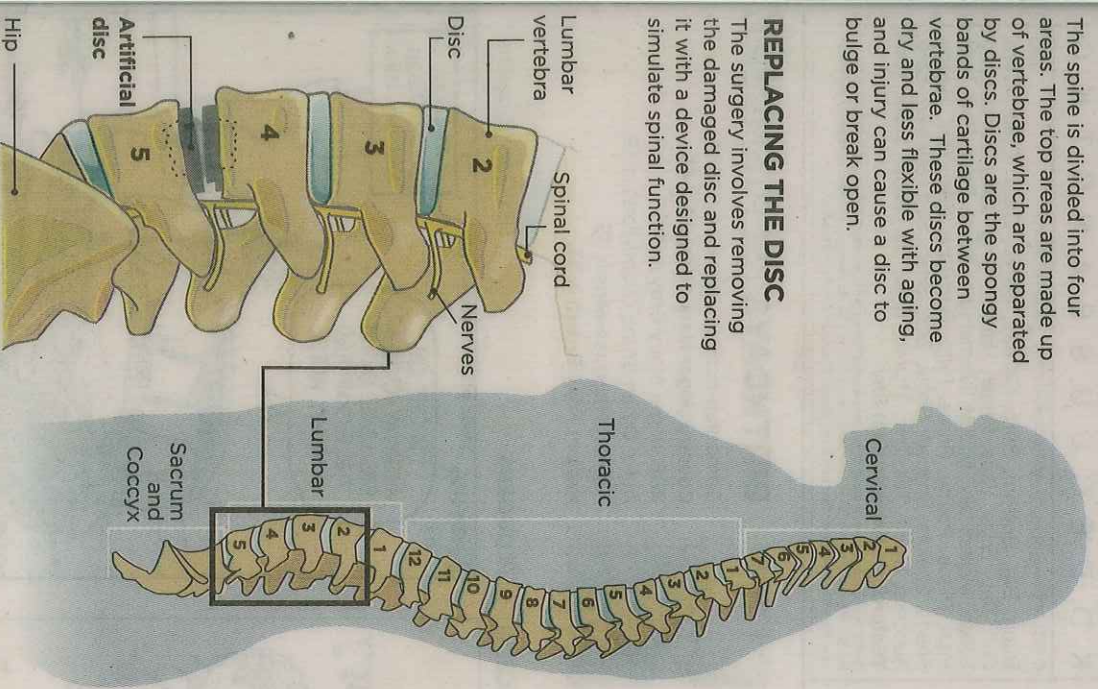
"Typically that means younger patients who have nothing

else wrong," she said. For patients outside of those criteria, she adds, insurance companies often won't pay, although practices that specialize in the procedure may have better luck on that count.

Both Ziegler and Kinchen agree that surgery — fusion or disc replacement — should be considered only after more conservative treatments, such as physical therapy, have failed. Bottom line: If you're considering any kind of back surgery, follow Houston's lead, and do your own cost-benefit analysis.

"Make sure you're the right candidate for this operation," Kinchen advises. *Mary Jacobs is a Dallas freelance writer.*

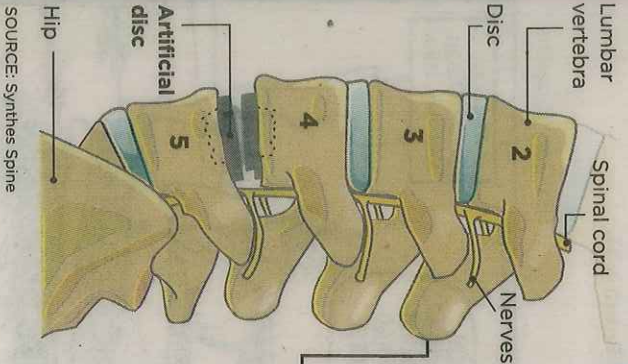
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### REPLACING THE DISC

The surgery involves removing the damaged disc and replacing it with a device designed to simulate spinal function.



SOURCE: Synthes Spine