

## **MEDICAL BREAKTHROUGHS** **RESEARCH SUMMARY**

TOPIC: BALLOON SPACER FIXES HARD TO REPAIR ROTATOR CUFFS  
REPORT: MB #4996

**ROTATOR CUFF TEAR BACKGROUND:** A rotator cuff tear is common among adults; in fact almost two million people are visiting their doctors due to rotator cuff pain in the U.S. each year. A torn rotator cuff weakens the shoulder making daily activities like brushing your hair, getting dressed or ready for the day painful. The shoulder has three bones, the upper arm bone or humerus, the shoulder blade or scapula, and the collar bone or clavicle. The humerus fits into a shallow socket in the shoulder blade. The arm is kept in its place in the socket because of your rotator cuff. The rotator cuff is a group of four muscles that come together as tendons to form a barrier around the top of the humerus. The rotator cuff attaches the humerus to the shoulder blade and allows you to lift and rotate your arm. There is also a sack called the 'bursa' that lubricates this area and allows the tendons to glide freely when you move your arm. When you injure your rotator cuff this sack can also become painful and inflamed.

(Source: <https://orthoinfo.aaos.org/en/diseases--conditions/rotator-cuff-tears/>)

**ROTATOR CUFF TEAR DIAGNOSING:** if you are feeling pain in the rotator cuff your doctor will perform a physical exam by pressing on different parts of your shoulder and move your arm into different positions. In some cases, an X-ray, ultrasound, or MRI is used to further diagnose the severity of the tear. Treatment can range from resting, icing, and physical therapy to surgery. You may have a rotator tear if you're experiencing what is described as a dull ache deep in the shoulder, a disturbance in sleep, it's difficult to comb your hair or reach behind your back and any arm weakness. This injury can be caused by progressive degeneration and wear and tear, or a substantial injury to the shoulder. Age, family history and construction jobs can be risk factors.

(Source: <https://www.mayoclinic.org/diseases-conditions/rotator-cuff-injury/symptoms-causes/syc-20350225>)

**ROTATOR CUFF TEAR NEW TECHNOLOGY:** Duke University has begun to offer a new surgical technique called 'superior capsule reconstruction' to repair damaged rotator cuffs. This technique inserts a human tissue graft, attaching one end to the upper-arm bone and the other to the shoulder socket. This will not replace your rotator cuff tendon but will perform the same function which is keeping the ball of the arm bone centered in your shoulder socket and help raise your arm. This surgery can be performed arthroscopically by inserting a camera and surgical instruments through small incisions that are about the width of a finger. The procedure is done under regional anesthesia and combined with sedation. Most patients go home the same day after surgery.

(Source: <https://www.dukehealth.org/blog/new-surgical-option-serious-rotator-cuff-tears#:~:text=In%20recent%20years%2C%20Duke%20shoulder,end%20to%20your%20shoulder%20socket>)

**FOR MORE INFORMATION ON THIS REPORT, PLEASE CONTACT:**

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**If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at [mthomas@ivanhoe.com](mailto:mthomas@ivanhoe.com)**