

“Cutting Edge Techniques In Orthopaedic Surgery and Sports Medicine.”

By J. Robert Gavin Jr. MD

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Your arm or shoulder has been hurting for weeks. That “pop” you heard in your knee is starting to bother you. Maybe that last tennis match or shooting some hoops has left you wondering if you may have torn or damaged cartilage.

When people think of seeing an orthopaedic specialist, they immediately think of surgery. Fortunately, many orthopaedic and sports medicine problems can be corrected with conservative treatments such as physical therapy, injections, bracing, rest or activity modification. If these nonsurgical treatments fail, below are brief descriptions of several of the latest techniques which have been proven to increase both patient satisfaction and results with surgery.

- 1) **Subcondroplasty** Although the knee is one of the strongest joints in the body, inflammation inside the bone of the knee can cause serious pain. After determination by clinical examination and MRI, subcondroplasty, a minimally invasive surgery may be recommended. This surgery consists of creating an access portal into the bone and filling the area with a bone substitute that sets and rejuvenates new, healthy bone to replace the defect.
- 2) **Knotless Rotator Cull Repair** This procedure gives the ability to save time and eliminate the possibility of shoulder pain due to knot impingement. Knotless sutures consistently provide a more dependable strength, especially for more robust repairs as opposed to traditional techniques. Larger tears may be more solidly fixated using double row knotless anchors.
- 3) **Personalized Total and Partial Knee Replacement** With a total knee replacement, the entire surface has to be removed, but with a partial you

get to keep up to 75% of your healthy knee-for a more rapid recovery with less pain and a more natural motion. The “Personalized” knee replacement technique is based upon your specific anatomy for the best fit. In addition to X-rays, an MRI of your knee is utilized, in conjunction with computer software creating a 3D image of your unique knee joint. This greater level of detail and precision allows for more patient specific positioning of knee implants.

- 4) **Robotics and Technology** The future of orthopaedics and sports medicine will be on the focus of techniques which enhance accuracy and efficiency, such as robotics. These surgeon guided machines may increase exact precision and consistent reproducibility for technically difficult procedures. For example, surgeons use some robots to pre-operatively plan and map the areas of diseased bone to be removed. During surgery, 3-D visualization and a robotic arm provide the surgeon with visual, tactile, and auditory feedback so only diseased bone is resurfaced, sparing healthy bone stock. Some of the benefits include a more “natural” feeling knee after surgery and most importantly a rapid relief from pain and shorter hospital stay.

At Gavin Orthopaedics, only after conservative treatments fail, my goal is to successfully treat your injuries with the most current, proven procedures and minimize your time away from the sports and lifestyle you love.