

# Innovative Arthritis Treatments

## An interview with Gregory Montalbano, MD

### Q: WHAT IS ARTHRITIS?

**A:** "There is a layer of thin material called cartilage that exists on the surface of the bones that make up the joints. Arthritis is damage to this cartilage surface. The most common form of arthritis is called osteoarthritis and is related primarily to 'wear and tear' damage."

### Q: IS OSTEOARTHRITIS PROGRESSIVE?

**A:** "Yes. The disease begins as cracking and softening of the cartilage surface and then progresses to deep cracks and then to eventual complete loss of the material surface. This advanced stage is often referred to as 'bone on bone'."

### Q: WHAT ARE THE SYMPTOMS OF OSTEOARTHRITIS?

**A:** "Early symptoms are activity related soreness, stiffness and possible swelling. Later symptoms are rest pain, joint snapping and difficulty with daily activities."

### Q: IS THERE A WAY TO CURE OSTEOARTHRITIS?

**A:** "The only cure for osteoarthritis is joint replacement."

### Q: WHAT IS A JOINT REPLACEMENT?

**A:** "Joint replacement is essentially a surface replacement where the damaged cartilage surfaces are replaced with a synthetic implant designed to replicate the joint anatomy."

### Q: ARE THERE WAYS TO PREVENT ARTHRITIS PROGRESSION AND AVOID JOINT REPLACEMENT?

**A:** "The most contemporary options for joint preservation leverage the power of the body's natural ability to heal. Platelet Rich Plasma is an orthobiologic therapy derived from the patient's own blood. A distillate is created which is extremely rich in growth factors. The plasma is injected into the joint and these growth factors signal the cartilage cells in a way that promotes activity. The stimulation of this cell population at the joint surface, trillions of cells, strengthens and slows down the rate of further cartilage loss. Scientific studies have demonstrated effectiveness using volumetric MRI analysis showing a reduction in cartilage loss. This is called a 'chondroprotective effect'. A recent article published in

the Washington Times suggests that using these types of advanced medical treatments, if started early enough, may prevent the need for joint replacement."

### Q: WHAT ARE STEM CELLS AND HOW ARE THEY USED?

**A:** "Stem cells are fresh progenitor cells. They are often harvested from a donor patient's bone marrow and then transferred into an area of tissue damage. When injected into an area of tissue damage they have the potential to become healthy productive cells and support local anatomy and function. The use of stem cells may prove to be an effective way to prevent degenerative disease such as arthritis."

### Q: WHAT ARE GEL INJECTIONS?

**A:** "Viscosupplement injections, otherwise referred to as gel injections or lubricants, are pharmaceutically derived hyaluronic acid. This is a material normally found in the joint where it functions as a natural lubricant but decreased levels are found in joints affected by osteoarthritis and aging. Hyaluronic acid products are delivered into the joint by injection and are designed to restore normal levels within the joint improving mechanical efficiency and reducing arthritis symptoms."

### Q: WHERE ARE THESE PROCEDURES PERFORMED?

**A:** "All of these 'needle based options' for osteoarthritis treatment are performed in our 10,000 sq/ft comprehensive SI facility, including sophisticated diagnostics-MRI, 3-D fluoroscopy suite, IV infusion suite, 10 procedure rooms, rehabilitation pool, underwater treadmill and more."

### Q: WHAT ARE THE LATEST TRENDS IN JOINT REPLACEMENT?

**A:** "Innovative technologies are available for properly trained surgeons. For example, computer software that interfaces with a CT scan of the joint allows precision planning of implant placement and intra-operative navigation with robotics and gives the surgeon the power to execute within 1mm of the planned implant placement. This level of accuracy and precision is a powerful tool that can drive better patient outcomes. Also custom implants can be manufactured to replicate the individual anatomy of any patient to deliver an implant that is an anatomic match for that person's joint."

### Q: YOU PERFORM JOINT REPLACEMENT AT NYU MANHATTAN. WHY AND DOES IT MATTER ?

**A:** "CMS - Center for Medicare Services ranks hospitals based on a 1-5 star scoring system that is designed to identify the safest and most reliable facilities from those that are less safe and less reliable. The latest report was April 2021 on 4,586 eligible US hospitals. NYU Langone received a 5 star rating and was 1 of only 7 hospitals in the entire state of NY and of only 2 in NYC that received 5 stars (NYU and New York Presbyterian). These were according to CMS the 2 most safe and most reliable hospital facilities in NYC. By comparison the hospitals located on Staten Island received 2 and 1 star ratings (SIUH and RUMC). These were by comparison, according to CMS, 2 of the least safe and least reliable hospital facilities in NYC. So for me as the surgeon making the choice for my patients, I choose NYU, which according to CMS, is 1 of only 2 hospitals in the region that has achieved their highest quality rating. NYU Langone Orthopedic Hospital is also where I trained and provides the latest technology such as computer based systems and robotics where I can deliver the most advanced level of care for my patients."

### Q: IS TRAVELING TO THE CITY FOR SURGERY AN INCONVENIENCE FOR THE PATIENT?

**A:** "The procedure is done in the city but all of the pre-op and follow up is done at the local Staten Island office. So, it seems to me to be a minimal inconvenience when you consider what you are getting in terms of quality. A 45 minute drive from Staten Island to Manhattan takes you from a 1 star to a 5 star CMS rated facility. I live in Manhattan and work there so I cross the bridges everyday. It's really not a big deal especially when you consider that people travel from all over the world to gain access to surgeons and healthcare facilities with this level of performance."



For more information, call **833-Go-IOrtho (833-464-6784)**, visit on social media by using **@iorthomd** or visit **iorthomd.com**

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