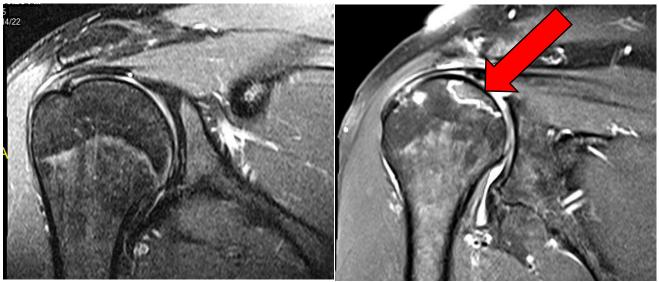
# STEVEN CHUDIK MD

# SHOULDER, KNEE & SPORTS MEDICINE

# **Drilling and Bone Graft Avascular Necrosis**

#### **Surgery Indications**

Avascular necrosis (AVN) is a condition in which the subchondral bone (bone beneath the cartilage of a joint) dies from an interruption to its blood supply. Once the bone dies, it is unable to maintain itself and it eventually fractures and collapses under the physiologic (normal) but significant compressive forces across the joint. This death and fracturing of the bone is associated with symptoms of pain. Often, surgery is necessary to stimulate the bone to re-vascularize and heal and/or repair/replace missing bone to support the joint surface. Avascular necrosis is associated with proximal humerus fractures, dislocations, repetitive trauma, compromised blood supply following injury, prolonged steroid use, and sickle cell disease.



The MRI image on the left shows a normal shoulder while the red arrow on the right MRI image indicates the area of AVN.

### **Contraindications to Surgery**

- Infection in the shoulder
- Inability or unwillingness to complete the postoperative program of limiting activity after surgery and to complete the necessary rehabilitation



Schedule online now

630-324-0402 ● contactus@chudikmd.com stevenchudikmd.com

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### SHOULDER, KNEE & SPORTS MEDICINE

### **Surgical Risks and Complications**

- Wound infection
- Bleeding or injury to blood vessels
- Injury to nerves (numbness, weakness, etc.)
- Non-union (non-healing) of the fragment (in repair situations)
- Shoulder stiffness
- Arthritis

#### **Hospitalization and Anesthesia**

- Outpatient surgery (you go home the same day)
- General anesthesia with interscalene block (numbing medicine injected around the nerves to the arm)

### **General Surgical Technique**

Some bony AVN lesions can be repaired while others cannot, depending on the size, location, age, etc. of the lesion. In most, Dr. Chudik evaluates and treats AVN through small limited incisions and specialized instruments of his own design with the use of an arthroscope (small camera). Limited areas of AVN without collapse are drilled percutaneously with small pins to stimulate the bone to re-vascularize and heal. If the bone has collapse or left a void, a larger tunnel may be drilled to the lesion to allow a passage way to insert bone graft to repair the defect and regain support of the joint surface and cartilage. More advanced stages of AVN can lead to collapse of the bone beneath the joint surface. This can compromise the cartilage and joint surface leading to arthritis of the shoulder joint and the need for shoulder replacement surgery. Dr. Chudik will discuss various options with you and help determine the best treatment for you.

### **Preoperative Instructions**

- Discontinue birth control pills
- Stop blood thinners such as aspirin, Coumadin<sup>®</sup>, Lovenox<sup>®</sup>, Xarelto<sup>®</sup>, Eliquis<sup>®</sup> according to the prescribing doctor's directions
- Stop anti-inflammatory medicines such as ibuprofen, Advil<sup>®</sup>, Motrin<sup>®</sup>, Naprosyn<sup>®</sup>, Alleve<sup>®</sup>, etc.)
- Stop nutritional supplements and drinks like Vitamin C, ginseng, ginkgo biloba, etc.
- Stop smoking for surgery and during the first six weeks postoperatively to allow proper tissue healing

### Do not eat or drink anything from midnight, the evening before surgery





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#### **Postoperative Course**

- Sling for up to six weeks to rest the bone and allow recovery.
- Return to sedentary work in less than one week
- Physical therapy to restore motion and strength for up to four to six months.

#### **Return to Activity**

- Return to gentle, daily activities about six to eight weeks after surgery
- Return to sports and more vigorous activities at the four to six months after surgery if the AVN has healed.

### **Scheduling Surgery**

Contact Dr. Chudik's surgery scheduler at 630-324-0402 or *contactus@chudikmd.com* to:

- Schedule the date and location of surgery (the hospital will call the day before with the confirmed arrival time)
- Schedule a pre-operative appointment
- Schedule a post-operative appointment for 10 to 14 days after surgery to remove sutures and review post-operative instructions

### Notify My Office if Symptoms Worsen





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