



# Non-Surgical Bone & Joint Treatment

Minimally invasive  
orthopedic procedures



**NORTH STAR**  
VASCULAR & INTERVENTIONAL

# Minimally invasive orthopedic procedures

...provide an effective alternative to surgery, injections and lifelong medication regimens.

Thanks to advances in medicine, many chronic or debilitating problems within the body's bones and joints (the musculoskeletal system) can now be treated without open surgery, without a hospital stay and with minimal downtime.

Our specially trained doctors, known as interventional radiologists, use imaging to guide treatment from inside the body. Not only is this less traumatic to the body than surgery, but it also requires no general anesthesia and lets you avoid many of the risks associated with surgery.



**Jafar Golzarian, MD, FSIR**



**Amin Astani, MD, MBA**



## *Spine fractures*

Vertebral compression fractures caused by osteoporosis and other conditions can now be safely treated without surgery. When a vertebra fractures or collapses, NSVI offers vertebroplasty and kyphoplasty, procedures that either repair or repair/restore height to the bone. The pain relief is near-immediate; patients see a noticeable improvement within hours of the procedure.

## *Achilles tendonitis*

Achilles tendinopathy is a painful condition of the Achilles tendon, the thick band of tissue that connects the calf muscles to the heel bone, that may or may not go away without treatment. NSVI offers a new procedure called transcatheter arterial embolization to block the vascular supply to this tendon, which can resolve pain and make it easier to walk and move normally again.





**At North Star Vascular & Interventional, precision therapies are available for the following musculoskeletal conditions:**

***Knee osteoarthritis***

Genicular artery embolization treats pain and inflammation within the knee by embolizing or “cutting off” blood supply to diseased blood vessels within the knee. Results are long-lasting and this procedure may help you avoid total knee replacement surgery in the future.

***Plantar fasciitis***

An alternative to fascia “release” surgery, plantar fasciitis embolization is an outpatient treatment that’s ideal for athletes who simply can’t wait up to 12 or more months or more for the fascia to heal, if it heals at all. It is also ideal for patients who wish to avoid orthopedic surgery for chronic plantar fasciitis.





## *Frozen shoulder*

Also known as adhesive capsulitis, frozen shoulder results in the gradual loss of movement within the shoulder joint. Frozen shoulders are highly vascularized, meaning that there is an excessive number of abnormally large blood vessels with the joint. Frozen shoulder embolization blocks the flow of blood in these vessels, resulting in less pain and inflammation, as well as greater range of motion in the shoulder.

## *Tennis elbow/elbow pain*

Like with frozen shoulder, lateral epicondylitis (also known as tennis elbow) results in an abnormal level of vascularization in the elbow joint that contributes to inflammation and pain. By blocking the blood supply to some of the blood vessels, the inflammatory cycle is disrupted, relieving pain and improving elbow function.



## The NSVI Outpatient Treatment Center

Our new center houses the latest and most advanced equipment for imaging-guided interventional radiology (IR) procedures, which require no general anesthesia and offer patients an easier and faster recovery compared to surgery.

Outpatient IR services offer a number of benefits to patients, including:

- A more comfortable, non-hospital environment
- Lower risk of infection
- Lower cost for procedures
- Less waiting, easy access and free parking

## Experience Matters

Our doctors are among the most experienced in the United States at performing vascular and interventional radiology procedures. They are fellowship trained and come from some of the region's most prestigious healthcare and academic institutions.



[NorthStarIR.com](http://NorthStarIR.com)

P: (952) 960-9399

F: (952) 206-6467

8401 Golden Valley Rd  
Suite 340  
Golden Valley, MN 55427