



Is Tactoset the  
Right Solution for Me?

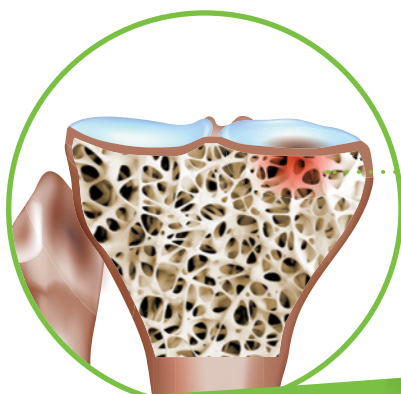
*A Patient's Introduction to*  
**Tactoset®**

Knee Patient Information Booklet


# What is the condition?

Small cracks in the bone, known as insufficiency fractures or stress fractures, that are located below the surface of the bone can cause significant pain.

Patients of all ages can suffer from stress or insufficiency fractures. The majority of younger patients' insufficiency fractures usually heal on their own, however, some can become chronic and no longer able to heal on their own. A chronic insufficiency fracture can be defined as a defect that has not healed after 3 months and typically requires surgical intervention.



*insufficiency  
fracture*



Patients with osteoarthritis (OA) are at a higher risk for developing insufficiency fractures. Adults of any age can suffer from chronic defects requiring surgical intervention, including patients from their 20's to their 80's<sup>1,2</sup>. Consult with your physician if you think you may have an insufficiency fracture.

## What does it feel like?

Insufficiency fractures are a relatively common cause of knee pain. The main symptom can be described as severe or worsening knee pain without a traumatic event or injury. Pain can be described as targeted and easily identifiable in a precise location.



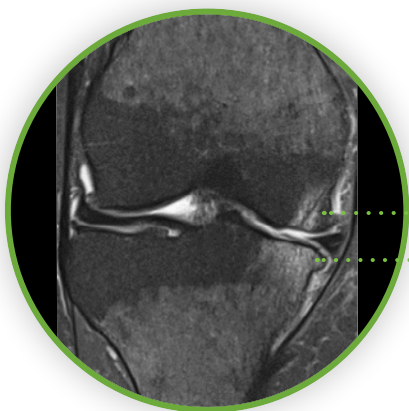
## What is an insufficiency fracture?

Insufficiency fractures can be categorized as tiny cracks or microfractures below the surface of the bone. They are a type of stress fracture that occurs below the cartilage on weight bearing joints.

Insufficiency fractures are typically a non-traumatic, slow healing injury.<sup>3</sup> They are most often caused by prolonged weight bearing, repetitive activities and normal or physiologic stress placed upon weakened bone as opposed to a single traumatic event/injury.<sup>3</sup> Insufficiency fractures have been linked with cartilage loss and the progression of OA.<sup>4,5</sup> Low bone density, or osteoporosis can also be a contributing factor.<sup>3</sup>

# How is it diagnosed?

Your surgeon will order an MRI based off your symptoms, clinical history, and a physical examination. Insufficiency fractures are not visible on a standard x-ray. They are only visible on certain types of MRI and are identified as a hazy white area on the bone, usually located near the joint line.



*MRI showing  
insufficiency  
fractures*



# What if I am being considered for a total knee replacement?

If you are being considered for a total knee replacement, ask your doctor if there are alternative treatment options or tests to determine if you may have an insufficiency fracture.

Multiple studies have shown that patients who have been diagnosed with chronic insufficiency fractures are more likely to progress to a total knee replacement.<sup>1,2,5,6</sup>



# What is Tactoset?

Tactoset is a bone substitute material that is easily injected through minimally invasive surgery to fill the cracks in the bone. Once injected, it hardens and mimics the properties of normal bone, effectively sealing the fracture.

Unlike other similar products, Tactoset includes hyaluronic acid, a naturally occurring substance in the human body. The hyaluronic acid increases the flowability of Tactoset allowing it to flow in and around the existing damaged bone structure without disrupting it.

During the healing process, Tactoset is resorbed by the body and replaced by the growth of new bone.



## What does the procedure entail?

It is a minimally invasive outpatient procedure performed under anesthesia and may occur in conjunction with a knee scope.

During the procedure, the surgeon will utilize fluoroscopy (intraoperative imaging) to identify the precise location of the fracture to determine where Tactoset will be injected. Once the location is identified, the surgeon will insert a small cannula (a thin metal tube) into the knee, through which Tactoset will be injected.

In your pre-operative visit, your surgeon will discuss the details of the procedure with you and answer any questions.





## What can I expect after the procedure?

Patients are typically treated in an outpatient setting and return home the same day. After the procedure, you will be given post-operative instructions.

Most surgeons will provide crutches for the first 3-5 days, but recommend weight bearing as tolerated.

Pain medication will often be prescribed for up to the first 5 days after surgery.

Physical therapy is typically recommended 7 to 10 days after the procedure to improve quadricep function focus on core strengthening.<sup>7</sup>



## Are there alternative treatment options?

Non-surgical conservative treatment options may include lifestyle changes such as weight loss and protecting your joints from excess stress, pain relievers, corticosteroid or viscosupplement injections into the joint space, or physical therapy. When conservative (non-surgical) treatments fail, your physician may recommend surgery.



## Is Tactoset the right solution for me?

If you suffer from or have been diagnosed with a chronic insufficiency fracture that continuously causes pain, surgical treatment could be recommended. If surgery is the path chosen, Tactoset may be the right solution for you.

As every patient is different, it is important to discuss your condition and all potential treatment options with your physician to determine if Tactoset is the right solution for you. There are risks and potential complications with every surgical procedure. Individual results may vary.

## References

1. Scher, C, et al. Skeletal Radiol 37, 609–617 (2008).
2. DeBernardis, D, et al. Arthroscopy, Sports Med, and Rehab 2020; Vol.2, Iss.5, E583-E590.
3. Gurlay, ML, et al. BMJ Case Rep. 2015;2015:bcr2015209399.
4. Alliston, T, et al. Orthop. Res., 36: 1818-1825.
5. Tanamas, SK, et al. Rheu, V.49, I:12, Dec 2010;2413–2419.
6. Raynauld J, et al. Annals of the Rheumatic Diseases 2011;70:1382-1388.
7. Stark, M, et al. Arthroscopy Techniques 2020; <https://doi.org/10.1016/j.eats.2020.07.005>

## Anika Therapeutics, Inc.

32 Wiggins Ave | Bedford, MA  
1-888-721-1600  
[www.anika.com](http://www.anika.com)

©2020 Anika Therapeutics, Inc.

Anika and Tactoset are registered trademarks of Anika Therapeutics, Inc.  
11/20 | AML 900-151/A



ANIKA