

# **Orthopaedic Connection**

## **Stress Fracture Treatment**

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### ***Transforming patient information into patient understanding.***

The saga of **Stress Fracture** is coming to an end! Do I hear cheering? Seriously though, I do see them in the office fairly often and I'd be remiss if your education didn't cover the subject reasonably thoroughly.

In this final segment treatment will be covered which is important.

### **Intrinsic factors**

In women, correcting problems of diet is very important. Menstrual problems need to be addressed. If bone mineral density is low, it must be treated aggressively by the family doctor or internist. Bone mineral density is readily available. It must be done if there is suspicion of low bone mineral density. It is referred to as osteopenia, which is a milder form of the dreaded osteoporosis.

### **Extrinsic factors**

Treating outside factors takes two directions. Training regimens that caused the stress fracture need to be reduced in duration and intensity. A hard surface on which the stress fracture developed usually cannot be modified, unfortunately. Footwear can be changed to be more accommodative in most cases.

### **Management of Stress Fractures**

In the majority of cases conservative treatment of stress fractures is successful. Some stress fractures however are prone to delayed or non-union. These are femoral neck, tibia, ankle and foot.

### **Low risk fractures**

The first phase of management is pain control. Activity modification is necessary to eliminate the activity that produced the stress fracture. Normal weight bearing and day to day activities are encouraged. Cycling, swimming and water running often allow the athlete to continue to exercise.

When the person has been pain free for two weeks, the sports activity is gradually re-introduced. Therapy modalities may continue. If possible the running surface and footwear should be adjusted.

### **High risk fractures**

The most common high risk fractures are of the shin bone or tibia. These fractures can heal and then return when the activity is resumed. A three to six month trial of non-operative treatment is necessary before considering an operation.

Stress fractures of the hip (femoral neck) are very dangerous and may require surgical "pinning" to stabilize them depending on the situation.

Ankle and foot fractures are usually managed in a non walking cast for six weeks followed by a weight bearing brace.

There is a high incidence of surgical treatment in ankle and foot stress fractures that fail to heal with conservative treatment.

### **Prevention**

Perhaps this paragraph should have been placed first and all the rest would be unnecessary!

- Eating disorders - avoid training i.e. running until problem is solved.
- Menstrual/hormone problems have to be successfully treated before participation.
- Avoid over training.
- Allow rest days.
- Use good running shoes probably with orthotics.
- If possible avoid hard running surfaces.

If these articles about stress fractures can be responsible for avoiding even one stress fracture, it will be time well spent.

As always, those wanting more information about stress fractures are invited to log onto our teaching website for patients and families, [www.orthopodsurgeon.com](http://www.orthopodsurgeon.com), which can take you to Your Orthopaedic Connection.

Our goal is simple - To help people return to more pain free functional lives.

Good health. Good life. All the best to you.

Be well.

Dr. Haverbush



