

**Dr. Jeffrey B. Witty**  
**North Oaks Orthopaedic Specialty Center**  
**drjeffreywitty.com**

### **Lower Extremity Stress Fracture Protocol: Protocol 2**

Phase I:

If extremity painful while simply walking:

- Alternate crutches and walking every other day for 3 – 5 days. If pain-free during this time, resume walking without crutches.
- If pain recurs, rest a day, then resume.

Note:

- Prior to beginning Phase II, you must be pain free while walking normally for at least 10 – 14 days. If pain occurs during any point of this protocol, **stop, have a rest day then return to the previous level that you were able to complete.**
- Total rest not necessary if extremity remains pain-free by eliminating the offending activity.
- A period of time non-weight bearing with crutches may be required if simple walking is painful.
- You may do other things to stay active as long as you have no pain while doing them. This includes pain that occurs after activity. Consider cross-training, bike, upper extremity conditioning, stairmaster, elliptical, or other activities that do not place repetitive/pounding stress on your foot.
- It may take between 4 - 16 weeks before return to full sporting activity depending on the severity of the stress fracture.

Phase II: Jogging done at ½ usual pace. Each 10 min session is repeated 3 times for a 30 minute walk/run.

- Day 1: Walk 30 minutes
- Day 2: Rest
- Day 3: Walk 9 minutes and jog 1 minute.
- Day 4: Rest
- Day 5: Walk 8 minutes and jog 2 minutes
- Day 6: Rest
- Day 7: Walk 7 minutes and jog 3 minutes
- Day 8: Rest
- Day 9: Walk 6 minutes and jog 4 minutes
- Day 10: Rest
- Day 11: Walk 4 minutes and jog 6 minutes
- Day 12: Rest
- Day 13: Walk 2 minutes and jog 8 minutes

- Day 14: Rest

Phase III: Begin running with progressively increasing intensity. To progress to Phase III, you must be pain free without pain during and after activity.

- Day 15: Jog 30 minutes at 50% normal pace
- Day 16: Rest
- Day 17: Run 30 minutes at 60% normal pace
- Day 18: Rest
- Day 19: Run 30 minutes at 60% normal pace
- Day 20: Rest
- Day 21: Run 30 minutes at 70% normal pace
- Day 22: Rest
- Day 23: Run 30 minutes at 80% normal pace
- Day 24: Rest
- Day 25: Run 30 minutes at 90% normal pace
- Day 26: Rest
- Day 27: Run 30 minutes at full pace
- Day 28: Rest

Phase IV: Begin adding frequency of runs. To progress to Phase III, you must be pain free without pain during or after activity.

- Day 29: Run 30 minutes at full pace
- Day 30: Run 30 minutes at full pace
- Day 31: Rest
- Day 32: Run 30 minutes at full pace
- Day 33: Run 30 minutes at full pace
- Day 34: Rest
- Day 35: Run 30 minutes at full pace

Phase V: Return to normal running activities.

Adapted from:

Warden SJ et al. Journal of Orthopaedic & Sports Physical Therapy. 2014

Chen Y et al. Curr Rev Musculoskelet Med. 2013

Arendt E et al. American Journal of Sports Medicine. 2003