

DANCER HEALTH TIPS FROM UAB SPORTS & EXERCISE MEDICINE

Stress Fractures in Dancers

Dale Colorado, DO, MPH

Stress fractures are small cracks in a bone that are usually caused by repetitive force or overuse. The movements performed by dancers, along with often rigorous training schedules, can make dancers particularly susceptible to stress fractures. One research study found that 19% of lower extremity injuries sustained by ballet dancers were bone stress injuries. Another study found that up to 14% of dancers reported a history of stress fracture(s). While stress fractures in dancers are most commonly seen in the foot, stress fractures of the tibia (“shinbone”) and the spine/low back are also common.



Stress fractures are not always seen on x-rays. It may take weeks after the pain has begun for changes to be seen and in some cases, it may never be visible on x-rays. Advanced imaging, such as an MRI, may be needed. A thorough history and physical exam, as well as an understanding of the unique risk factors often seen in dancers, is important for early diagnosis and treatment. Undiagnosed stress fractures can lead to more serious complications.

As we discussed in our [August 2024 dancer health tips](#), we know that inadequate nutrition, insufficient rest, and irregular menstrual cycles can negatively impact bone health which can lead to stress fractures. Treatment of stress fractures in dancers should look at the whole picture, not just for quicker recovery but also to prevent future injuries.

Stress fractures can be challenging for dancers and athletes since treatment typically involves a period of rest to allow bone healing. However, early diagnosis and treatment will allow sooner return to dance activities. Untreated stress fractures can worsen and take much longer to heal.

Is there a dancer health related topic you want to learn more about? Or maybe you have a specific question? Send those to us via email (rachel@alabamadancecouncil.org) and we will try to answer them in future articles.

About the Author:



Dale Colorado, DO, MPH is an Assistant Dean at the UAB Heersink School of Medicine. He is an Associate Professor and Vice Chair in the Department of Physical Medicine and Rehabilitation at UAB. He serves as Chief of Sports and Musculoskeletal Medicine, as well as Medical Director of Performing Arts Medicine. He is board certified in both Sports Medicine and Physical Medicine and Rehabilitation. Dr. Colorado has lectured nationally and written multiple articles and textbook chapters on musculoskeletal issues related to performing arts medicine and sports medicine. He is a member of the Performing Arts Medicine Association and International Association for Dance Medicine and Science.

For an appointment with Dr. Colorado or anyone on the UAB Sports & Exercise Medicine team, please call us at **205-930-8339** or visit us online at uabmedicine.org/sports.

References:

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- 2 Kadel NJ, Teitz CC, Kronmal RA. Stress fractures in ballet dancers. *Am J Sports Med.* 1992 Jul-Aug;20(4):445-9.