

DANCER HEALTH TIPS FROM UAB SPORTS & EXERCISE MEDICINE

Knee Pain in Dancers

Dr. Dale Colorado, Medical Director, Performing Arts Medicine

Injuries involving the knee are common in dancers. While the foot/ankle is injured most frequently, the knee is the second most injured among dancers. In particular, anterior knee pain (pain in the front of the knee) can affect up to 33% of dancers. This is typically caused by patellofemoral pain syndrome.



Patellofemoral pain syndrome is more common in females and young active adults and adolescents. It results from the kneecap (patella) not tracking correctly within the groove. Patients will usually describe diffuse anterior knee pain, particularly during squatting, running, or going up and down stairs. There is typically no initial trauma or inciting event. Dancers may report knee pain with grand plié and demi plié activities or with landing jumps.

In dancers, turnout technique can put increased stress on the knee, particularly if the dancer is trying to grip their feet instead of externally rotating the hip. Lack of control/stability in the hips and core, flat feet, as well as foot pronation (putting more weight on the inside of your foot) can all contribute to patellofemoral pain syndrome.

Even though patellofemoral pain syndrome presents primarily with knee pain, evaluation should also involve assessment of the torso, hips, and foot/ankle. Weakness in the core/hip muscles, weakness and/or tightness involving the quadriceps muscles (in the front of your thigh), tightness of the hamstring muscles (in the back of your thigh), tightness of the calf muscles, and decreased ankle movements are important factors to identify in order to optimally treat and prevent patellofemoral pain.

Patellofemoral pain can be difficult to manage and can often recur. In addition to addressing strength, flexibility, and proprioception deficits to improve tracking of the patella, dance

technique should also be investigated. Other treatment options may also need to be considered, such as orthotics or medications. If you have been dealing with knee pain, contact a physician who is familiar with the dancer/athlete population.

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 also an Associate Professor and Vice Chair in the Department of Physical Medicine and Rehabilitation at UAB. He serves as Medical Director 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 authored 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 and Exercise Medicine team, please call us at **205-930-8339** or visit us online at uabmedicine.org/sports.