When Is It Safe to Run? Applying Four Pain Rules to Running Participation

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Musculoskeletal pain and injury impacts 19% to 79% of novice and elite distance runners (1,3,4). Runners may disregard pain to achieve personal distance goals or participate in competitive events (3). Later, these same runners may seek medical care for worsening pain. While the presence of mild chronic pain may be a sign of a long-term preexisting condition, such as osteoarthritis, *changes* in pain symptoms with running may indicate significant biomechanical stresses and a brewing injury. A complete description of the pain symptoms from the patient should be obtained with respect to the severity and type of pain (using anchors of 0 to 10 in a numerical pain rating scale and verbal descriptors, such as "achy," "sharp," or "throbbing") (2), anatomic location of the pain, and onset of pain (before, during, or after the run). Clinicians can educate patients on the following rules to guide running participation:

- Pain that increases during a running session should be avoided, and the activity should be reduced or stopped immediately. If the pain quality changes from dull to intense (achy to sharp), the activity should be stopped.
- Joint pain should not persist or increase by 24 h after exercise, because this indicates that the musculoskeletal system was not prepared for the running volume of that session.
- If preexisting mild joint pain is present (<3 points out of a 10-point scale), the pain should not worsen during the exercise session or last into the next day.
- If the pain causes a limp or a compensatory gait change, the exercise volume must be reduced or the exercise must stop until a normal gait pattern occurs. Persistence of asymmetric gait due to pain interferes with normal tissue healing and may increase the risk for more injuries (5).

These rules can be applied to any runner, irrespective of age, body habitus, and experience. Moreover, these rules can help runners self-regulate progression of running programs and determine whether additional rest is needed before reengaging. If pain persists even when these rules are followed, clinical work-up for injuries is needed.

References

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