

ATHLETES WITH SICKLE CELL TRAIT

HEAT CRAMPS vs SICKLING

1. Muscle twinges vs No muscle twinges
2. Hobble to a halt vs Slump to a stop
3. Excruciating pain from cramping vs Milder, ischemic pain from decrease blood flow
4. Fully contracted muscles vs Weak and wobbly
5. Yelling in pain vs Complains little and lies fairly still
6. Muscle rock hard vs Muscle looks and feels fairly normal

WHAT MAKES SICKLING WORSE

1. Heat
2. Lack of Sleep
3. Dehydration
4. Altitude
5. Asthma
6. Illness

ONSET SYMPTOMS

1. Struggling in drills
2. Weakness
3. Fatigue
4. Pain
5. Shortness of breath

PREVENTION

1. Stop at the onset of symptoms: do NOT urge them to continue on or push through
2. Athlete should be encouraged to report any symptoms
3. Avoid any start of the season conditioning tests
4. Acclimate: build up slowly into conditioning and lifting.
5. Undergo preseason and year-round conditioning
6. Modify drills: No time sprints or miles. No all out exertion for 2-3 minutes without breaks. If repeat sprints are done you must double or triple the rest time in between

sets. Let them set their own pace, catch their breath.

7. Hydrate before, during and after exercise
8. Curb activity in hot or humid conditions
9. Monitor workouts in new altitudes
10. Curb activity after illness
11. Control asthma
12. Curb activity after sleep loss

TREATMENT

1. Check vitals
2. Cool athlete: Some mile sickling will improve with cold tub and oxygen
3. If no improvement quickly or vital signs and/or alertness decline:
 - a. Call 911 – Immediately
 - b. Attach AED
 - c. Get to hospital quickly

Athletes who collapse from sickling can still talk when they hit the ground unlike most cardiac collapse even though they are gravely ill.

Acclimation, like heat acclimation can occur within 7-21 days, with most sickling problems occurring within the first 2 weeks of workouts.