

What to do When Racewalking Gives You the Creeps



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- Introduction

When working with racewalkers--particularly with older racewalkers--one often encounters difficulty in helping the athlete to overcome knee-straightening problems. Although some athletes simply need to be shown the proper technique, many need to overcome more fundamental impediments before full straightening can be achieved. The unfortunate reality, however, is that very few sources actually outline procedures to conquer "creeping sickness." Much like Ross Perot's crazy aunt in the basement, everybody knows there's a problem but nobody wants to talk about it. This article may help to open the floor to further discussion.

- Assessing the problem

The first order of business is to determine if the walker is physically able to straighten the knees. Simply have the athlete stand "at attention" with feet together and legs straightened as much as possible without excessively tightening the quadricep muscles. The fronts of the thighs and shins should make a straight line in relation to one another, or even bow inwards to meet the knee. (Be sure to examine the front of the legs--pronounced calf and hamstring musculature will cause the back of the legs to appear bent even when the knee is fully straightened). If the legs are fully extended and the knees still look bent, tight muscles are probably to blame. After 20-80 years of ordinary walking as well as running, fitness walking or even advanced competitive sedentarianism, many athletes are plagued by such tight leg muscles that full straightening--even while standing--may be difficult.

Other athletes have no obvious muscular tightness, and are able to straighten when standing, but fall into a "Groucho Marx Shuffle" when racewalking. These athletes need remedial work in the mechanics of racewalking. They often come from running backgrounds and are using the wrong muscles to drive themselves forward--primarily the quadriceps. This generally leads to a high knee lift with the leading leg which makes straightening on contact difficult.

Many of these athletes are able to pick up proper racewalking technique by simply watching and mimicking athletes with efficient technique. Running should not be used as a cross training exercise until proper racewalk technique is fully ingrained.

One thing to note is that the lead leg should be driven forward with the knee bent at about 90 degrees. By bending the knee fully and driving the knee forward (rather than up) the lower leg gains a great deal of momentum when the thigh stops advancing and begins to pull back just before heel-contact.

- Stretching those ol' dogs

If the creeping problem can be attributed to muscular tightness, stretching the hamstring and calf muscles may solve the problem. After warming up, the athlete should stretch the gastrocnemius and soleus muscles of the calf by performing "wall stretches." The left gastrocnemius is stretched by standing with the left leg about two

feet behind the right and leaning against a wall while keeping the rear heel on the ground (figure A). Slightly bending the knee, (figure B), will stretch the soleus. Switch legs to stretch the right calf.

Calf stretches

To stretch the hamstrings the walker should lie on his back with one knee bent, foot on the floor and the other leg extended (figure C). The extended leg is grasped with both hands until a stretch is felt.

Hamstring stretch

All stretches should be held for at least 10-20 seconds. Athletes should stretch after every workout, but if time does not permit, at least three days per week should be devoted to an overall stretching/strengthening routine. These stretches, in addition to proper warm up before workouts and races, should help to reduce stiffness that may lead to bent knees.

- Other things to try:
- The brick: Many walkers coming from running or fitness walking backgrounds have difficulty attaining a proper degree of "hip drop." Hip drop acts as a shock absorber, easing the impact of "riding through" on a straight lead leg. Without sufficient hip drop, shock is often reduced by slightly bending the knee. The specific muscles used during this phase of the walking gait can be stretched by standing with one foot on a brick or two-by-four and the other on the floor. Of course there's one catch.... Both knees must be straightened! Always maintain a comfortable, erect posture without bending at the waist.

The Brick

- Strengthening: Weak quadriceps muscles are another contributor to bent knees. The quadriceps (the muscles in front of the thighs) can be strengthened at home with a "dynaband" or other elastic device,

or with a light (10 lb.) weight hung from the ankle. A simple implement can be made by inserting a pair of small five pound weights into a long sock. After tying off the end of the sock, the device can be hung from the ankle with one weight hanging on each side of the leg. The athlete should sit in a sturdy chair with one leg fully extended. The knee is then bent 15-20 degrees, then re-straightened to lift the weight. Work up to three sets of ten repetitions to strengthen the quadriceps through the final 15-20 degrees of their range of motion.

- Avoid wearing "fat" shoes: If the athlete is walking "flat footed," lifting the forefoot slightly upon heel contact will help to straighten the knee by slightly extending the reach of the lower leg. Shin pain, however, may prevent walking with the toes raised. At the moment of heel contact a walker's shoe acts like a lever. The thicker the midsole, the greater the force imparted to the heel extending behind the ankle--the fulcrum of the lever. If the walker wears a shoe with a very thick heel the foot tends to flatten quickly, slapping the ground with every step. This often causes pain in the anterior tibialis, or shin muscles. Wearing a thinner shoe will reduce these forces and, ultimately, ease knee straightening. Strengthening the ankle and shin muscles is also important. Again, a dynaband--or a hanging sock with lighter weights--can be used. Walking for several minutes on the heels is another excellent strengthening exercise (Figure E).

Walking on heels

- Avoid overstriding: When the advancing leg is thrown too far forward, the knee will often reflexively "break" to make heel contact with ground sooner. Of course this may prevent the walker from falling on his face, but it can lead to a far worse fate--disqualification. Shortening the stride in front of the body will not only eliminate straightening problems in some individuals, it will also increase efficiency. "Riding" on the straight leg far beyond the vertical support phase by keeping the rear foot on the ground longer will make up for lost stride length in front of the body--and increase power.
- Posture, posture, posture!: Body posture is also very important. Many racewalkers tend to slump forward by bending excessively at the waist. The center of gravity is shifted forward over the lead leg. When walking speed is increased, momentum collapses the knee when the heel touches the ground, causing "the creeps." A forward lean of 5-8 degrees is recommended by some authors, but this is simply not the case. Any "lean" is an artifact of a strong push from the rear leg, but this apparent "lean" should end at the waist--Overall body carriage must be erect (figure F).

Lean from the ankles,
don't bend at the waist.

- Hill work: Racewalking slowly up a gradual incline is an excellent way to accentuate proper straightening technique. A short stride in front of the body and a strong drive from the rear leg are quite necessary when racewalking up hills. The athlete should walk several repeats up the hill under the supervision of a knowledgeable friend or spouse. Hills tend to magnify technique problems, especially when the athlete is fatigued--the partner should make certain that the athlete is walking correctly at all times. Make certain body carriage remains erect on the hill--no leaning!

After objectively assessing the reasons behind a particular walker's creeping tendencies, it is often relatively easy to eliminate the problem. If the athlete's technique is a hybrid of running and walking elements, flaws can be eliminated by demonstration of the proper technique. If tightness and weakness are to blame, the walker must take remediation into his own hands by thoroughly stretching and strengthening the affected areas. In all case, however, patience and persistence are generally rewarded by better, faster and more legal racewalk technique.

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