

Hamstring Prevention Program

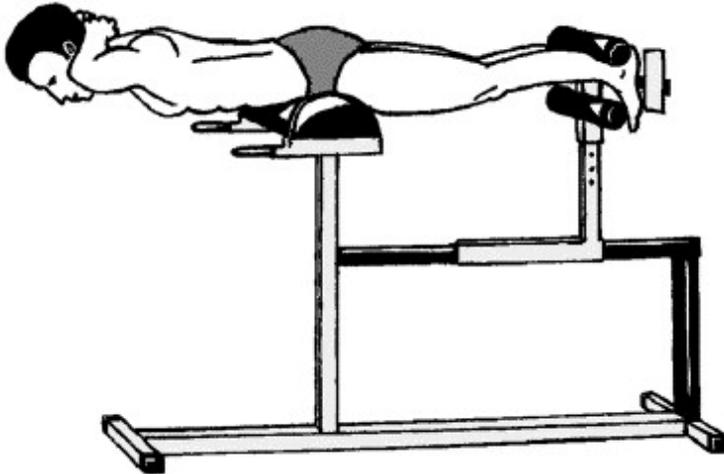
Prevention programs is another tool to help reduce the chances of injuries but does not completely rule out the injury.

Disclaimer: PLEASE stop exercises if you experience any pain or any discomfort at all. If pain and discomfort still persist, please contact the Athletic Trainer for further assistance or if it is an emergency, call 911.

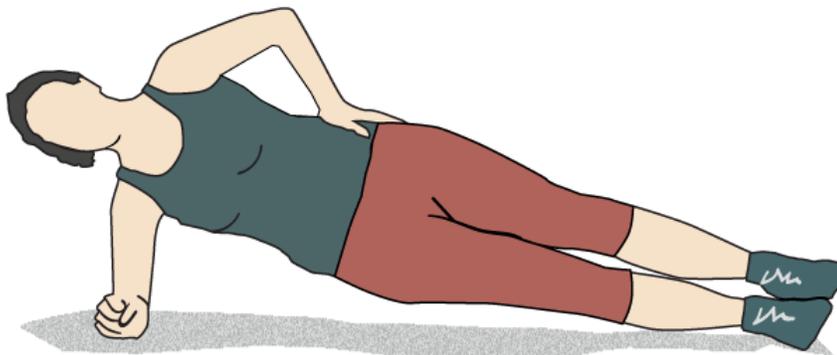
Prevention exercises are based on the combination of Sherry and Best 2014³, Al Attar et al 2017⁴, and Shield and Bourne 2018⁵.

Stability exercises:

- ❖ Sorensen Test to failure



- ❖ Side bridge to failure

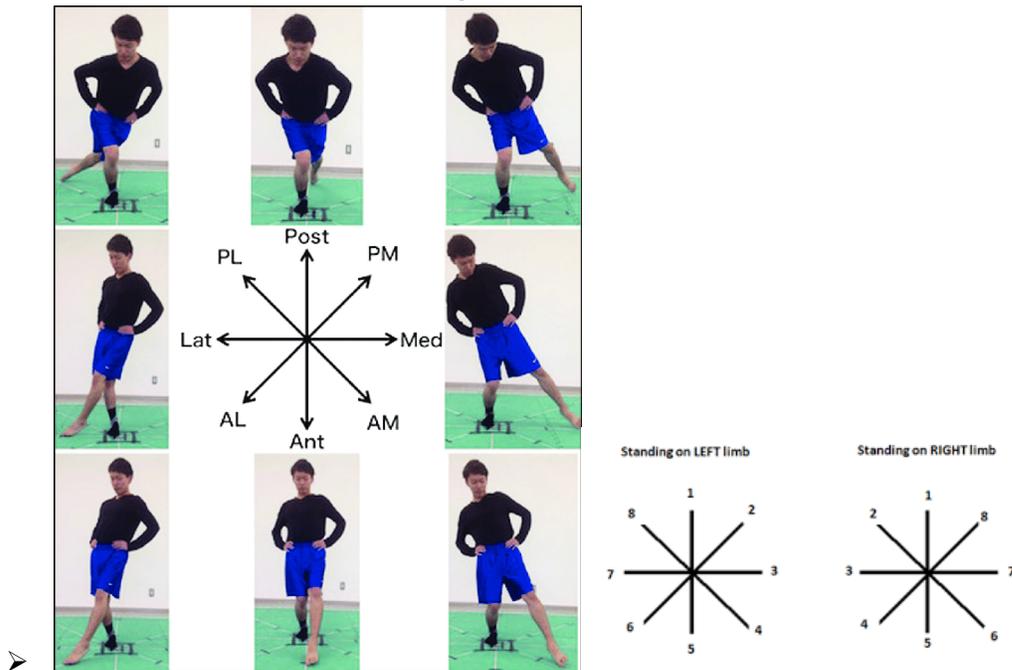


❖ Sahrman test

Table 3 Sahrman Core Stability Test	
Level 1	Begin in supine, crook-lying position while abdominal hollowing Slowly raise 1 leg to 100° of hip flexion with comfortable knee flexion Opposite leg brought up to same position*
Level 2	From hip-flexed position, slowly lower 1 leg until heel contacts ground Slide out leg to fully extend the knee Return to starting flexed position
Level 3	From hip-flexed position, slowly lower 1 leg until heel is 12 cm above ground Slide out leg to fully extend the knee Return to starting flexed position
Level 4	From hip-flexed position, slowly lower both legs until heel contacts ground Slide out legs to fully extend the knees Return to starting flexed position
Level 5	From hip-flexed position, slowly lower both legs until heels 12 cm above ground Slide out legs to fully extend the knees Return to starting flexed position

* Subsequent levels begin in this hip-flexed position.

❖ Star Excursion balance test for both leg

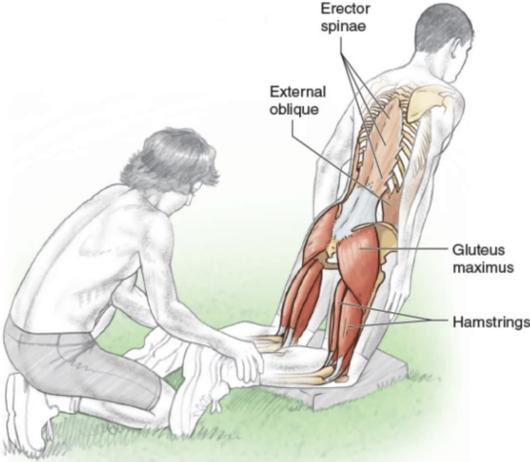


❖ Multifidus walks with trunk twist both sides

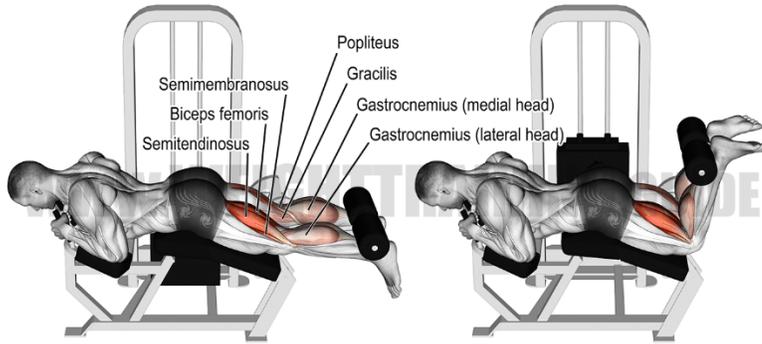


Hamstring Strengthen exercises:

❖ Nordic hamstring curls



❖ Hamstring curls with slow holds



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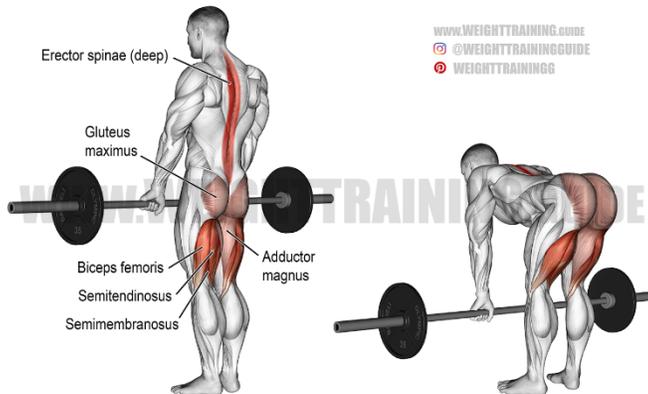
❖ Hip extension



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❖ Stiff leg deadlifts



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❖ Hip flexion



Progressive agility and trunk stabilization:

❖ Phase 1

- Low- to moderate-intensity sidestepping, 3×1min
- Low- to moderate-intensity grapevine stepping (lateral stepping with the trail leg going over the lead leg and then under the lead leg), both directions, 3×1min
- Low- to moderate-intensity steps forward and backward over a tape line while moving sideways, 2×1min
- Single-leg stand progressing from eyes open to eyes closed, 4×20 sec
- Prone abdominal body bridge (performed by using abdominal and hip muscles to hold the body in a face-down straight-plank position with the elbows and feet as the only point of contact), 4×20 sec
- Supine extension bridge (performed by using abdominal and hip muscles to hold the body in a supine hook lying position with the head, upper back, arms, and feet as the points of contact), 4×20 sec
- Side bridge, 4×20 sec on each side (Figure 3)
- Ice in long sitting for 20 min

❖ Phase 2

- Moderate- to high-intensity sidestepping, 3×1min
- Moderate- to high-intensity grapevine stepping, 3×1min
- Moderate- to high-intensity steps forward and backward while moving sideways, 2×1min
- Single-leg stand windmill touches, 4×20 sec of repetitive alternate hand touches (Figure 4)
- Push-up stabilization with trunk rotation (performed by starting at the top of a full push-up, then maintain this position with 1hand while rotating the chest toward the side of the hand that is being lifted to point toward the ceiling, pause and return to the starting position), 2×15 reps on each side
- Fast feet in place (performed by jogging in place with increasing velocity, picking the foot only a few inches off the ground), 4×20 sec
- Proprioceptive neuromuscular facilitation trunk pull-downs with Thera-Band, 2×15 to the right and left
- Symptom-free practice without high-speed maneuvers
- Ice for 20 min if any symptoms of local fatigue or discomfort are present

Bibliography

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