Practical Suggestions for Addressing Hamstring Issues

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Queens University of Charlotte
My Background

● Decathlete - Diverse background in training
● Experienced Moderate Hamstring Issues
  ○ Always felt like I understood why I experienced hamstring injuries
  ○ Lack of proper warm up
  ○ Being substantially under at plant in pole vault
● MA and BS in History
● Voracious Reader
Henrik Holmberg

Came to me with the following personal bests:

- HJ - 1.91m
- LJ - 6.40m
- 400 - 51.5
- Very Athletic, lots of potential
- No matter how strong we got, he pulled his hamstring
Hamstring Issues Addressed

Brad Pfeifle
VP, MS, ATC – VP of Sports Medicine & Rehab Services
## Performance Pre/Post Hamstring Issues

<table>
<thead>
<tr>
<th>Event</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>100M</td>
<td>11.32</td>
<td>10.98</td>
</tr>
<tr>
<td>Long Jump</td>
<td>6.40</td>
<td>7.33</td>
</tr>
<tr>
<td>High Jump</td>
<td>1.91</td>
<td>2.05</td>
</tr>
<tr>
<td>Decathlon</td>
<td>Did not Complete</td>
<td>7173</td>
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What was I missing?

- Wasn’t strength related
- I wasn’t addressing these needs in my programming
- Started by asking Henrik
  - Described various isometric holds not related to weight lifting
Andrea Cota

*Human Performance Specialist*

Andrea Cota began as a human performance specialist for the South Dakota track and field program in 2013-14. She works with functional movement screening, serves as the team nutritionist and works with the weight training program.
Exposed to New Material

- FMS Screening
- Supple Leopard
- Mobility WOD
- Mike Boyle
- Functional Mobility Institute
What do we need to know about the hamstring?

- It loves doing the work of other muscles
- Primary function in MAX Vel is to function as a brake for the femur
- Doesn’t function well as the extensor of the hip based on insert location on pelvis
Knowledge and understanding is critical to evaluating and determining issues.

- Agonist/Antagonist relationships
- Stretch Reflex Mechanism
- Elasticity
- Proper Postural and Pelvic alignment
- Primary Engines of Movement - Hips and Shoulders
Douglas Heel - Muscular Activation

- Described resolving strength issues with pressure points
- Ordered the DVDs
- Practiced on myself and staff
- Found some very impressive results
- Developed chart to assist athletes with activation
- Found that issues were addressed but not resolved
- Continued to look for answers regarding continued development of functional movement
Addressing Correct Motor Patterns

- Correct motor patterns must be observed and cued
- Practice doesn’t make perfect if it is not perfect practice
- It does make relatively permanent however
Where do we address movement patterns?

- Hurdle mobility is an excellent teaching tool
- General Strength
- Multi Throws
- Multi Jumps
- In all movement from simple → complex
- Typically must be rehearsed sub maximally
Movement Screens

- Develop athlete buy in
- Enhance spatial and body awareness
- Establish baselines
- My athletes that pass movement screens with flying colors have limited issues
Trainers and Strength Staff

- Important to have discussion with athletic trainers and strength staff in regards to what is being implemented
- A great deal of damage can be done in the weight room
- Trainers should follow movement based recovery strategies that enhance correct motor function
Further Reading and Resources

- Mobility WOD - www.mobilitywod.com
- Supple Leopard - by Kelly Starrett
- Gray Cook - FMS screen
- Boo Shexnayder - Handling Hamstring Injuries
Feel free to contact me with questions

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