

Tennis Safety Tips – How to Prevent and Manage Tennis Injuries

Sponsored by MGH Sports Medicine and MGH Department of Physical Therapy

The Massachusetts General Hospital Sports Medicine Service and Department of Physical Therapy has teamed up with the Boston Lobsters to help tennis enthusiasts of all ages develop methods and strategies for preventing tennis injuries and illness, and to help appropriately manage them if they occur. Each program will feature a short article contributed from MGH physicians, physical therapists, and athletic trainers that will prove informative for Boston Lobster Fans.

Shoulder and Elbow Injury Prevention and Conditioning

Unfortunately, shoulder and elbow injuries occur frequently in tennis players of all ages. There are many causes of these injuries. These may include one or a combination of the following:

- Using a racquet that has the wrong grip size, is too light or heavy or is strung with too much or too little tension
- Poor stroke mechanics and technique
- Not having sufficient strength and endurance of the muscles that surround and support the shoulder and elbow
- Having good cardiovascular endurance to allow you to get into position to hit the ball appropriately using your body and appropriate technique and not just reaching with the racquet

Often time's poor stroke mechanics and technique can be related to having insufficient hand, wrist, elbow and shoulder muscle strength and endurance. As muscles fatigue a player may compensate and use poor technique. This compensation may in turn lead to overuse and injury of the muscles, tendons and other structures that surround the elbow and shoulder. Ultimately, pain and injury may result, causing the tennis enthusiast to limit or stop competition.

Obtaining and maintaining proper strength and endurance of key muscle groups will minimize the players' chance of injury and help to maximize performance. The exercises necessary to improve the strength and endurance of these key muscle groups require minimal equipment and can readily be done at home or at the club on an ongoing basis. Critical factors that all players should remember when starting a tennis strength and conditioning program are:

- Start slowly and gradually.
- Emphasize muscle endurance over strength at the beginning of a program. Utilize light weights or resistance and higher repetitions at the start of your program. You can progress to higher weights or resistance and lower repetitions as time goes on.
- Maintain and use appropriate body mechanics.
- You should not feel any "pain" during these exercises but should feel muscle fatigue. If you feel pain you should stop and consult your physician, physical therapist or athletic trainer.

Key muscles to emphasize are your rotator cuff muscles, muscles that control the position of your scapula, and your wrist extensor and flexor muscles. Strength and endurance of your rotator cuff and especially your scapula muscles are critical to avoid shoulder injuries, while a balance of strength at the wrist and elbow are critical to avoid elbow injuries.

A general program with suggested exercises for these critical muscle groups is attached. Please review the instructions for each and follow the directions provided. If you have any questions or concerns you should consult with your coach, physician, physical therapist or athletic trainer.

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