Golf Injuries

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Golf injuries can include either over use or traumatic injuries $^{1}\,$

Upper limb injuries are also common due to their role in linking the fast moving golf club with the power-generating torso.

1 Professional Golf Injuries

Professional golfers primarily experience overuse injuries¹

Overall injury rates do not have a consensus, but include the following:

- Left wrist (for Right handers)¹
- Low back¹
- Neck¹

1.1 Gender differences

Most common sites of injury for professional male golfers were:

- 1. Low back¹
- 2. Left Wrist (for right handers)¹
- 3. Left shoulder (for right handers)¹

Female professionals common injuries:

- 1. Left wrist (For right handers)¹
- 2. Low back¹
- 3. Left hand (For R-handers)¹

1.2 Causes

Professionals generally have good golf mechanics so the chance of them injuring themselves due to an improper swing is very low

Professional golfers generally experience injury due to excessive practice¹. Since the professional's income and career achievement is based on golf, they are more likely to re-aggravate existing injuries compared to an amateur¹.

2 Amateur golfers

Amateur golfers primarily experience injury secondary to incorrect golf swing mechanics¹ Common injury sites in amateur golfers:

- Low back
- Wrist
- Elbow
- Shoulder

2.1 Gender

Differing research exists, whether low back or wrist is the most common injured site in amateur males¹.

The most common injury site in amateur females was the elbow¹.

2.2 Causes

Most elbow injuries were diagnosed as Lateral epicondylitis (tennis elbow) and usually occurred in the non-dominant elbow (L elbow for R-hand golfers)¹

the most common MOI:

- Overuse injury
- Poor swing biomechanics
- Hitting the ground during the swing

3 Amateur vs Professional

4 Injury Type

4.1 Overuse injury

More common are the overuse injuries associated with the back, neck and shoulder¹

4.2 Injury location

5 Specific injury sites

5.1 Low Back injuries

Many studies report the low back to be the most commonly injured site in golf ($\sim 23.7-34.5\%$ of all injuries)¹

Incorrect swing/miss is the most common method to injury the back¹

The mechanics of the golf swing place a large range of motion and force on the low back such as:

• Downward compression¹

- Side-to-side Bending¹
- Sliding, back to front shearing¹

Peak load during a golf swing on the low back is 8xBW, as opposed to 7xBW while rowing and 3xBW while jogging¹.

5.1.1 Low back Amateur vs Professional

- A mateurs use 10% more peak muscle force during swing, which places more load on the <code>lumbar spine^1</code>
- Amateurs and professionals experience similar compressional loads¹
- Amateurs experienced 80% more lateral bending and peak shear loads¹
- Amateurs displayed 50% more torque¹

5.2 Wrist/Hand injuries

Incorrect swing/miss is the most common method to injure the wrist¹

- 5.3 Elbow injuries
- 5.4 Shoulder injuries
- 5.5 Knee injuries
- 6 Major injuries: Head & Eye

7 Other injuries

Stress Fx

1. McHardy A, Pollard H, Luo K. Golf injuries: A review of the literature. *Sports Medicine* (Auckland, NZ). 2006;36(2):171-187. doi:10.2165/00007256-200636020-00006