



GOLF BIOMECHANICS

The biomechanics of technical sports have often been linked closely with injuries that are unique to that sport. The most well known of these is the link between the biomechanics of fast bowling in cricket and the development of stress fractures of the lumbar spine. A sudden increase in the incidence of such stress fractures was seen around the time of Jeff Thompson, an Australian fast bowler who was genuinely quick and extremely successful in the 1970's. He had a very side-on technique, and it was thought that young bowlers and coaches trying to emulate his technique led to the increased incidence of lumbar spine stress fractures. Similar observations have been seen in pole-vaulters since the Russians introduced a technique based on the giant swing seen on the high bar in gymnastics.

The modern golf swing is very compact and most coaches have a solid technical model and coach it well. That is not to say that the forces produced by modern day golfers don't put the body at risk of injury. Anyone who has seen Tiger Woods launch into a 300 meter drive would have to agree. Injuries are not uncommon amongst the world's leading golfers, and many are plagued by chronic injuries, particularly in the latter years of their careers. Back injuries to players such as Fred Couples and Davis Love III have been well documented, and Greg Norman and Jack Nicklaus have succumbed to chronic hip injuries. More recently Peter Lonard exacerbated a rib injury, which initially was caused by overuse, doing a stretching exercise with his fitness trainer!

In the 1970's a group of young American golfers began to challenge the dominance of Arnold Palmer and Jack Nicklaus. One of these was Johnny Miller, who ironically recently achieved notoriety for publicly criticising the swing of Craig Parry. He had a very aggressive swing, and he achieved extra power and distance by pushing his hips through on his follow-through, putting his back into a hyper-extended position. This became known as the "inverted C position" and became seen as one of the reasons for his success. Not surprisingly, golfers all around the world tried to emulate his technique, producing an increase in the incidence of lumbar spine injuries that lasted well into the 1980's. A number of leading golfers subsequently underwent swing reconstruction to prolong their careers.

That is not to say that the modern day swing is perfect. It is frightening to think of young golfers everywhere trying to swing the club with the force of Tiger Woods and John Daley. The golf swing is a very individual thing and needs to be treated as such. What works for one golfer will not necessarily be the correct model for somebody else. The bottom line is that if a golfer is consistently getting injuries, it may well be worth a trip to a qualified teaching professional for a swing analysis and if need be, technical changes. It could well prevent further injury and with a little bit of luck could improve the handicap as well.