



## Golf Workshop Peak Performance & Body Function



PGA Pro - Scott Stiles



## Speakers

- Dr. Michael Schmolke - Chiropractor
- Scott Stiles - PGA Professional

*We change lives through inspiration,  
empowerment, and excellent health care delivery*



## Our workshop objectives

- Review facts on golf injuries and why they occur
- Review technique basics and common mistakes
- Understand golf body mechanics and demands
- How to help the golfer play an enjoyable game and tips that increase the game's enjoyment and player's well-being



## Golf facts



- Originated in Scotland.
- Dutch, French, Germans and Belgians had similar games.
- Boomed in last 1/2 of 18<sup>th</sup> century. Golf came to America officially at St. Andrews Golf Club on Yonkers, NY in 1888
- Golf has exploded into one of the largest sports worldwide. Close to 30 million US, 3 million Canadians. AB and SK lead provinces!



## Golf facts on the game



- Golf is a great outdoor sport played together with friends, family, colleagues, or alone.
- USGA handicap system - everyone can be competitive among participants
- Lively competition in golf. Unlimited opportunity of person v person; person v themselves; and person v the course
- Golf is a game of a lifetime (ageless)

## Golf facts on injuries

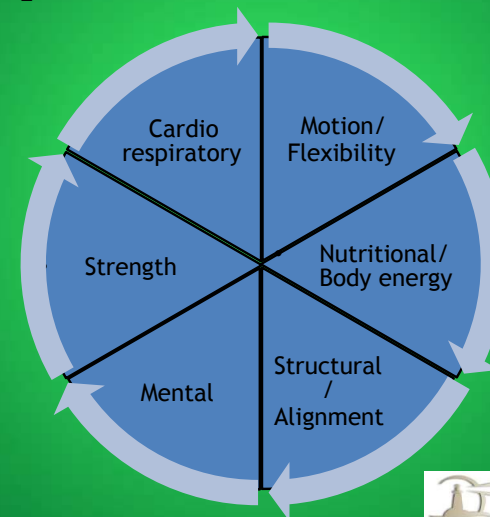


- Most common complaint among touring PGA and LPGA pro's is: Low Back Pain
- 10-33% or more touring pro's play injured
  - From AHCRP - the most effective tx for LBP is spinal adjustments - 96% is provided by Chiropractors
- Estimates suggest 50% of golfers will develop chronic problems
- Most common complaint among amateur golfers is shoulder/wrist, neck, mid and low back symptomatology

## Golf facts for amateurs & pros

- Most common cause of golf related injury in pros > Cumulative trauma disorders
- Most common cause of golf related injury in amateurs > Poor swing mechanics
- For both pros and amateurs, injury incidence increases with advancing age

## Wellness approach to health and sports performance enhancement



## Golf G.A.S. basics

Grip – Aim – Set Up



Your #1 goal is to get solid club contact!

## Get a “Grip”



- Both V's of your hand grip are to point up to your front shoulder!

## Grip Checks



- Hand position – precision influences wrist function
  - Neutral, strong (lt thumb to rt side), weak (rt thumb to lt side)
- Grip pressure
  - Scale to check: 10 – Max force; 1 – club drop; “4” is ideal
- Grip comfort
  - Relates to hand anatomy, age, strength, glove use, personal!
- Equipment considerations
  - Different grip sizes available; Larger grips more comfortable and require less grip pressure, but decrease club head velocity (Grip size is all personal preference, there is no right or wrong, just need to find what is most comfortable)

## Basics on aim & healthy golf posture

- Athletic posture and alignment is key
  - Target line (your aim)
  - Club face
  - Ball position
  - Right foot parallel (for the right handed golfer)(Both feet can turn outward, this promotes balance and helps increase shoulder turn)
  - Toe line parallel
  - Hips and shoulders parallel

## Basics on Set up

- Foot distance
  - Balance is key
  - Wide stance = more stable but less stability
  - Narrow stance = more mobility but less stability
- Foot position
  - Aim your feet parallel
- Weight distribution
  - Should be between the arch and balls of feet
- Balance



## Basics on Set up

- Knee position
- Centre of gravity in set up
  - Want this to fall ~ 6 inches in front of sacrum
- Bent forward from the hip (not the low back)
  - Want to preserve the lumbar lordosis curvature. This allows for optimal lumbar and pelvic motion. Loss of lordosis (or extreme increase) prevents optimal mechanics in swing



## Basics on Set up

- Arm position
  - Arms hang neutral and parallel
- Constant posture principle
  - Move as a unit: Knees soft, hips constant, maintain height until completing your follow through



- Grip precision maintained

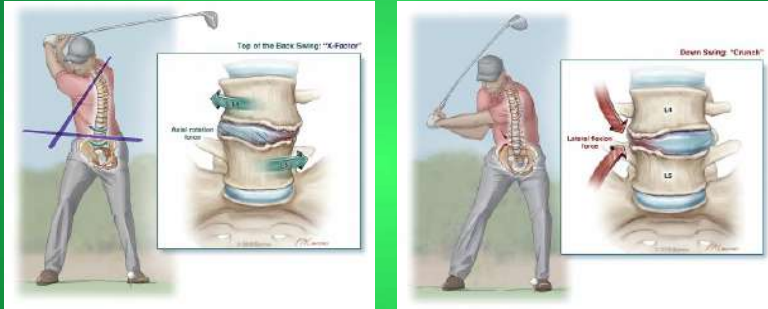
## Thoughts on your swing style

- Modern swing      verses      Classic swing



- Discuss the pros and cons of both

# Golf as a contact sport? How a golf swing can lead to early lumbar degeneration



Schematic demonstrating the local effects of the modern golf swing on the lumbar spine (example shown at the L4-5 level), contributing to repetitive traumatic discopathy. Upper: During the backswing, maximal rotation of the golfer's shoulders relative to the hips creates wound-up potential energy known as the "X-factor," while also creating a supramaximal amount of torsional axial rotation of the lumbar spine. Lower: During an explosive downswing, lateral flexion results in a "crunch" of the trailing side of the spine, asymmetrically loading the disc and facet joints. [Credit: © 2018 Barrow Neurological Institute.]

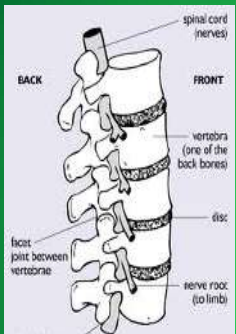
# Golf Injuries

## • Main causes:

- Overuse/Repetitive
  - Inadequate warm-up
  - Technical errors during swing
  - Decreased physical health/fitness
- Aerobic, Muscle strength, Flexibility

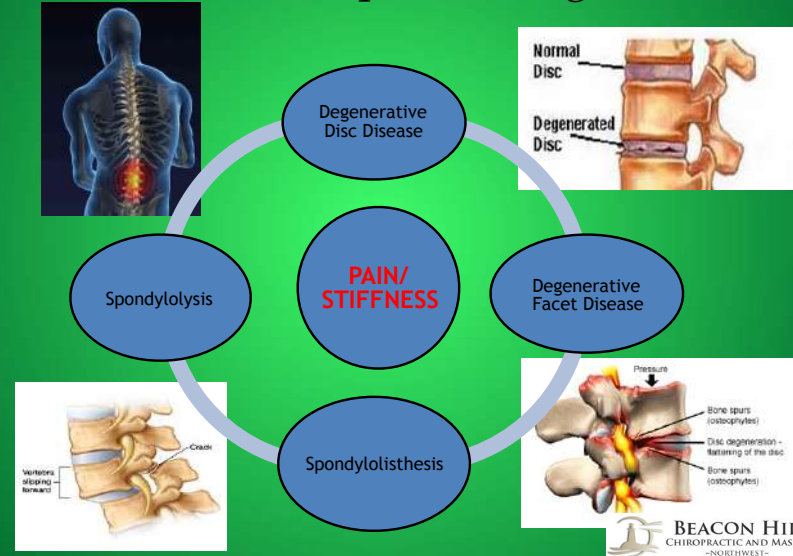


# Back Care



- **Discs** – our shock absorbers. **May become inflamed or herniated.** Depend on hydration, good nutrition, posture, mobility, and rest.
- **Facet joints** – the motion guiders. **May become inflamed or locked up.** Require free motion and regular weight bearing exercise to stay healthy
- **Muscles** – the movers and workers. Depend on resistance work vs. rest. **May become strained (muscle belly) or sprained (tendon),** Depend on good nutrition, strength, and flexibility for good operation
- **Bones** – Structural support and leverage. **May become fractured.** Depend on weight bearing exercise, good nutrition, Vits. & Mins., vitamin C for good health

# Golf mechanics on pre-existing diseases



# A little common sense helps

- It is not what you lift – its how you lift!
  - Grabbing your ball out of the cup, and placing a tee can cause as much injury as poor swing technique to your discs, muscles and joints
  - Clubs in and out of trunk of car!
- Bend with your knees, drop down onto a knee, or use ball grabber device.
- No hen peck bending!



# Other Common Golf Injuries



## Golfers Elbow

- Pain on the inside of the elbow d/t dec. T/S ROM, improper use or overuse
- Worse with flexion/pronation of the arm
- Treatment: Chiropractic. Massage. Acupuncture. Graston. ART. Stretch.



## Shoulder Pain

- Pain anywhere on shoulder d/t dec. T/S ROM, improper posture, overuse, degen
- Worse with abduction/ flexion of the arm
- Treatment: Chiropractic, Massage, Acupuncture, Graston, ART, Stretch, Strengthen



## Knee Pain

- Pain on the inside, outside, front, or back of the knee d/t dec. hip ROM, improper form, degenerative
- Worse with weight bearing

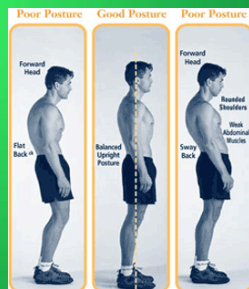


## Plantar Fasciitis

- Pain mainly on the inside of the heel, but can spread to entire plantar surface
- Pain worse in the morning that gets better after taking a few steps
- Treatment: Chiropractic, Massage, Acupuncture, Orthotics, Stretch, Strengthen

# The golfer's posture: good & bad

- Posture is critical to good health, longevity and a great golf game!



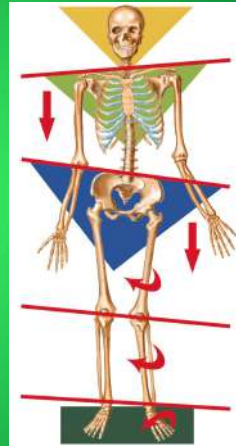
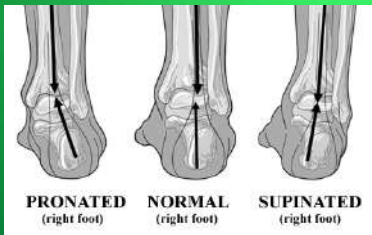
# Ground support – key to the game

- The foot has 26 bones, 100 ligaments, 32 joints, and 3 arches.
- Average daily walking produces 320 - 400 tons of pressure! Walking a course??
- Sleek, effective custom orthotics help golfers prevent biomechanical stress to their feet, ankles, knees and hips, avoiding wear/pain.
- Modern orthotics are made for golfers!



## Orthotics support structure

- 95% pronate; 5% supinate
- Drop/torque or tilt in ankle creates chain reaction in body's bones, joints, muscles.



## Preventing injuries means planning

- Most critical thing in avoiding injury is adequate instruction on technique, precise and consistent focus, and some relaxation on the attachment to the outcome.
- Now we can hatch a plan to avoid these game ending misfortunes.

## Flexibility and warm-up for function

- Key stretching routines help avoid unnecessary stress to the body during golf
- **Dynamic warm-ups** are most important part of the getting ready for a round!
- Stretches need to be gentle and held for 20-30 seconds for most effectiveness

## Stretches for golf

Ankles, calves, wrists, and shoulders



## Stretches for golf

Lower back, hips and thighs and trunk



## Strengthening for golf

- This involves muscle conditioning and balance training.
- CORE FITNESS IS A MUST!!
  - Walking lunges
  - Balancing squats to 90 deg on a rocker board, Bosu ball, or stacks of towels
  - Plank/side plank + hip hinge
    - bursts & reps vs holds



## Cardio-respiratory demands of golf

- Efficient heart and lung function and capacity improves your game, reduces injury, and increases enjoyment
  - Key is a walking program. The most suited for golfers, most stimulating to the brain to activate spinal muscles while improving heart & lung function. Keep a good posture when walking.
  - Use a pedometer, fitbit, or phone GPS. Walk 10000-15000 steps per day!

## Golf nutrition considerations

- Your big risks in golf include:
  - Dehydration – will affect discs, joints and muscles  
Formula [Body Wt (lbs) / 2 = # fld. oz H2O daily PLUS 8 oz / hour exercise]  
*Example: 160lb golfer/2 = 80 oz / day or 10 glasses PLUS 4 glasses during 18 hole round*
  - Lack of quality protein to rebuild muscles
    - Lean wild meat, fish, nuts & seeds, egg, beans, legumes, protein powder
  - Quality energy and snacks to last the distance
    - Mainly fruit and lots of vegetables. Keep carbohydrates unrefined
- You need to prepare and be consistent:
  - Prepare the day before your round & plan the day of nutrition.

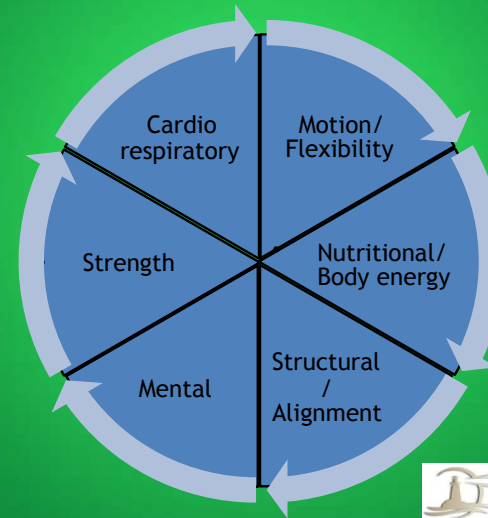


## Other nutritional gems

- Hydrate to lesson the spinal (disc) shrinkage
- Increases in your Vitamin C intake – for cartilage and muscle resiliency and healing
- Glucosamine sulphate 1500 mg/ day over 45 you
- Curcumin longa....Anti-arthritis and anti-inflammatory effects!!
- No beer or other diuretics prior or during game
- Vitamin D3 @ 5000 IU daily is more important than Calcium intake for bone density



## Wellness approach to health and sports performance enhancement



## Considerations

- Full "Season Readiness" exam and assessment with the doctors at Beacon Hill Chiropractic and Massage
  - Posture, Gait analysis, Flexibility testing, spinal examination and x-rays if needed, Nutritional assessment, Stretching and Fitness plan recommendations, Custom Golf Orthotics if needed, Supplementation strategies for any challenges/goals.
- Prepare for your best season now!
- Any final Q&A for Scott and the doctors?



## Upcoming workshops

- Intermittent Fasting & Detoxification  
May 28, 2019 at Beacon Hill

