

Correct footwear

(vic) Pty L

Polly Dhar

Physiotherapist

www.physiohealth.com.au

Facebook - Physiohealth

Twitter: @PhysioSharbs

Introduction

- There is some evidence that there is link between surface stiffness and friction and injuries
- There is evidence to show that correct footwear reduced injury risk
- That different types of footwear is required for different surfaces to reduce injury risk
- Difference between playing matches and training

Surface related injuries

- 2 main factors
- Stiffness of surface and friction between surface and shoes
- Stiffness- hardness of surface
- Influences chronic and overuse injuries
- Friction- could account for about 2/3 of all injuries
- Shows the important of correct footwear for surface and correct fitting of footwear

Friction and footwear

- High friction between shoes and surface may produce excessive force of knees and ankles
- Low Friction may reduce performance negatively and may cause injury as make surface more slippery.



- Upper- designed to add spin to ball needs to be strong enough to support foot during change of direction when kicking
- Heel counter- needs to be very rigid to support rear foot during swerving and stepping- a sturdy heel cup can reduce injury risk
- Midsole-wedge under heel or mid sole provide some cushioning help in injury prevention especially server's disease Achilles tendinopathy and knee injuries. Reduced impact severity
- Outsole- rigid and match the width of the foot



- Studs provide traction on a Varity of surface, help with distribute the force
- Grip provided is a function of the depth penetrated
- Very wet surface short stud fail to penetrate increased risk of slipping
- Very hard surface short studs will not allow good penetration leading to pressure on heel and forefoot
- Position of stud important to reduce slipping and pressure through foot

Type of footwear



Firm Ground (FG) or Molded - These are built for most firm natural surfaces. They use molded studs to provide traction on most pitches and are by far the most popular and versatile outsole for natural surfaces. Molded boots feature both conical and bladed studs. Running in molds on grass reduced force though lower limb compared with trainers

Type of Footwear



Soft Ground (SG) or Replaceable - For soft or wet natural surfaces (i.e. well-groomed pitches or mud). Traditionally, soft ground/replaceable have used fewer well-spaced, longer replaceable studs, however many now have bladed studs that are not actually removable. They are the choice for many professional players on manicured pitches. If used on pitches that are too hard, they can create stud pressure pain and lead to injury.

Type of Footwear



Hard Ground (HG) or MultiGround (MG) -

Created for artificial or hard natural surfaces like artificial turf or solid. Hard ground soccer cleats generally have a large number of short studs that are usually evenly distributed across the entire outsole.

Type of Footwear



Turf - Turf shoes or turf boots usually feature an extremely durable rubber outsole. Turf shoes often feature small rubber studs or patterns on the outsole to improve traction on hard, natural fields and artificial turf. Turf boots are also great for soccer training and for play on hard surfaces.

Summary

- Important of boots correctly fitting
- Different footwear for different surfaces due to friction and stiffness of surface
- Reducing injury risk
- Surface does not necessary increase injury risk but inappropriate footwear on surface can increase injury risk