Welcome to the sixth issue of THE ORTHOPAEDIC PRACTITIONER your new online newsletter
As a member of the AOP–UK you can access this exclusive newsletter on line.
Helping you keep up to date.

In this issue: Continuing the new series on Casting

A/E ED BACKSLABS

Special Points of Interest in this Issue:
- Anatomy and Physiology of the Hand Part 6
- The Volar Thumb Extension Back Slab
- AOP 2013 Lectures
- AOP 2014 Conference Taster
- AOP 2014 Conference in Nottingham

AOP Conference 2013 & 2014

Make sure your Membership is up-to-date
For AOP Membership Renewal Form SEE PAGE 28
AOP WELCOME

HELLO AND WELCOME TO YOUR
6th AOP THE ORTHOPAEDIC PRACTITIONER ONLINE NEWSLETTER.
THIS ISSUE HAS TAKEN ME LONGER TO PUT TOGETHER
BUT ITS WORTH WAITING FOR.
AS EACH ISSUE COMES OUT I HOPE TO IMPROVE AND MAKE IT BETTER FOR YOU
ALL WITH MORE ARTICLES AND INTERESTING FACTS.
IF YOU HAVE ANY ARTICLES OR INTERESTING TIPS PLEASE GET IN TOUCH WITH
ME AND GET YOURSELVES IN PRINT IT WORKS WONDERS FOR CV’S AND
COUNTS TOWARDS YOUR PERSONAL PROFESSIONAL DEVELOPMENT
THE AOP CONFERENCE WAS HELD AT THE MARRIOTT HOTEL IN LEICESTER ON
7TH TO 9TH JUNE 2013 THIS ISSUE HAS LOTS OF NEWS ABOUT IT
SO WHAT’S IN STORE FOR YOU THIS ISSUE READ ON TO FIND OUT

PAGE INDEX

PAGE 2 AOP WELCOME
SEE PAGE 3 ANATOMY AND PHYSIOLOGY OF THE HAND PART 6
SEE PAGES 4 TO 6 A/E E/D BACKSLABS CONTINUED
THE VOLAR THUMB EXTENSION BACK SLAB
SEE PAGE 7 MBE HONOUR FOR AOP MEMBER
SEE PAGES 8 & 9 AOP CONFERENCE 2013 PHOTOS
SEE PAGES 10 TO 13 AOP CONFERENCE 2013 LECTURE
SEE PAGES 14, & 15 AOP CONFERENCE 2014 TASTER
SEE PAGES 16 TO 24 AOP CONFERENCE 2013 LECTURE
SEE PAGE 25 AOP BREAKOUT WORKSHOPS
SEE PAGES 26 & 27 AOP CONFERENCE 2013 PHOTOS
SEE PAGE 28 AOP MEMBERSHIP FORM
FOR YOUR COLLEAGUES TO JOIN US
SEE PAGE 29 AOP CONFERENCE 2014
SEE PAGE 30 ROUNDUP

HOPE YOU ALL ENJOY YOUR LATEST NEWSLETTER

Darlene Anne Lathall
AOP Membership Secretary / Newsletter Creator / Editor
E-MAIL darlenelathall@hotmail.com

WWW.AOP-UK.COM
3. THE ULNAR NERVE

The Ulnar Nerve arises as a continuation of the Medial Cord of the Brachial Plexus C8, & T1.
It often receives fibres from the 7th Cervical Nerve.
It is classed as mixed sensory and motor type.

It descends on Coraobrachialis Distally through the Axilla,
on the Medial side of the Axillary Artery and between the Axillary Vein,
continuing Distally on the Medial side of the Brachial Artery as far as the Mid Arm.
It travels Anterior to the Triceps.

At the Mid Arm it pierces the Medial Intermuscular Septum,
then descends in front of the Medial Head of the Triceps,
between the Medial Epicondyle and Olecranon, lying in the Ulnar Groove
accompanied by the Superior Ulnar Collateral Artery,
then entering the Posterior Compartment.

It then enters the Anterior compartment and winds under the Medial Epicondyle
passing between the Two Heads of Flexor Carpi Ulnaris.
To enter the Forearm and supplies Flexor Carpi Ulnaris
and half of the Flexor Digitorum Profundus.

In the Lower Forearm the Artery lies Lateral to the Ulnar Nerve and
Flexor Carpi Ulnaris.
Here Dorsal and Palmar Cutaneous Branches are given off.
The Ulnar Nerve passes superficial to the Flexor Retinaculum and then
divides into Terminal Branches of the Superficial Terminal Branch and
the Deep Terminal Branch.

The Ulnar Nerve supplies the following
1. Adductor Pollicis.
2. Flexor Carpi Ulnaris.
3. Flexor Pollicis Brevis.
5. Medial Half of Flexor Digitorum Profundus.
6. Medial Two Lumbricals.
7. Palmaris Brevis.

Effects of Injury

Motor Deficit = Injury to the Ulnar Nerve leads to Hyperextension of the 4th / 5th
Metacarpal Phalangeal Joints and Flexion of the Interphalangeal Joint.
The Little Finger drifts into Abduction and the Hypothenar Muscles Atrophy this
known as Claw Hand.

Sensory Deficit = By banging the Ulnar Nerve it sends Pins & Needles down the
Medial Border of the Forearm, Little Finger and Half the Ring Finger.
Usually known as banging your Funny Bone.
THE VOLAR THUMB EXTENSION BACK SLAB

WHAT IS THE VOLAR THUMB EXTENSION BACK SLAB?
It is a BACKSLAB used to SPLINT TENDON INJURIES of the THUMB and ARM

THE VOLAR BACK SLAB

EQUIPMENT NEEDED
1 X THUMB AND 1 X 7.5CM STOCKINETTE
1 X 5cm & 10CM ORTHOPAEDIC WOOL
3 X 10CM SLAB OF PLASTER OF PARIS
1 X 15CM SLAB OF PLASTER OF PARIS
1 X 10CM COTTON BANDAGE
1 X 10CM CREPE BANDAGE
STICKY TAPE TO HOLD DOWN BANDAGE 1 X SLING

1. Prepare the arm by getting the patient to rest the arm down and fingers straight.
   Put on the 7.5cm STOCKINETTE over the THUMB STOCKINETTE TO HOLD it down.

2. WRAP the 5CM ORTHOPAEDIC WOOL around the THUMB.

3. WRAP the 7.5cm ORTHOPAEDIC WOOL from the tips of the fingers all the way down to the elbow.
4. Apply the 1st SMALL-LAYER of 10cm PLASTER SLAB to the THUMB.

5. Apply the 2nd 10cm LONG PLASTER SLAB from the FINGERTIPS to hold the THUMB SLAB in place to just BELOW the ELBOW.

6. Then Apply the 2nd SMALL LAYER and Create a RIDGE on the PLASTER SLAB so it gives a TRAMLINE EFFECT.

7. Apply the 15cm slab creating ridges on the PLASTER SLAB so it gives a TRAMLINE EFFECT then SMOOTH along BOTH RIDGES until SET. The PURPOSE of the RIDGES are to REINFORCE the slab as this is a well known drunken Saturday night injury.

8. Use the 1st 10cm COTTON BANDAGE to hold the PLASTER SLAB onto the ARM.

9. Turn back the edges of the STOCKINETTE at the THUMB, FINGERTIPS and ELBOW. BANDAGE the ARM with the 2nd CREPE BANDAGE.
10. The CREPE BANDAGE is HELD DOWN with PINK ELASTOPLAST STICKY TAPE. If the PATIENT has ALLERGY USE THE NON ALLERGY TAPE.

Many thanks to STAFF NURSE VARSHA RAMSURN and STUDENT NURSE LORRAINE PELL for their help in the presentation.

What has been shown is how we deal with TENDON INJURIES TO THE THUMB AND ARM in NOTTINGHAM.

The VOLAR THUMB EXTENSION BACK SLAB is put on to protect the THUMB and ARM until the next HAND FRACTURE CLINIC.

At the HAND FRACTURE CLINIC the VOLAR THUMB EXTENSION BACK SLAB is removed and the THUMB and ARM are examined then usually goes back into a new VOLAR THUMB EXTENSION SLAB until SURGERY or sometimes a THUMB EXTENSION HAND SPLINT is applied.

The VOLAR THUMB EXTENSION BACK SLAB is used for TENDON INJURIES to the THUMB and ARM.

We now run DEDICATED HAND FRACTURE CLINICS on a MONDAY, WEDNESDAY and FRIDAY MORNINGS along side normal Fracture Clinics.

DARLENE ANNE LATHALL FAOP SRN /BCC ORTHO P TECH (CERT) FRACTURE CLINIC QMC NOTTINGHAM UNIVERSITY HOSPITALS
HONOUR FOR AOP MEMBER

Congratulations to Mr John Mooney who in the Queen’s Birthday Honours List was Awarded the MBE. Well done John a great achievement.

Mr John Mooney Receiving his MBE from HRH Prince William at Buckingham Palace London
AOP CONFERENCE 2013 PHOTOS

EVEN MORE CONFERENCE PHOTOS

WWW.AOP-UK.COM
AOP CONFERENCE 2013 PHOTOS
MANY THANKS TO BENECARE FOR USE OF PHOTOS

WWW.AOP-UK.COM
AOT CONFERENCE 2013 LECTURE

The AOP 2013 Conference was held at the Leicester Marriott Hotel from the Friday 7th to Sunday 9th June 2013. To start off the Friday Lectures Mrs Sue Miles gave her lecture an update on where we are on Education and achieving Mandatory Regulation.

BRITISH CASTING CERTIFICATE ORTHOPAEDIC PRACTITIONERS EDUCATION AND REGULATION—WHERE ARE WE NOW?

SUE MILES
NATIONAL CASTING TRAINER ADVISER
BRITISH ORTHOPAEDIC ASSOCIATION

REGIONAL COURSES
STANMORE 3 PER YEAR
BRADFORD
GLASGOW
NEWPORT

BRITISH ORTHOPAEDIC ASSOCIATION & ASSOCIATION OF ORTHOPAEDIC PRACTITIONERS RUN AWARDS AND GLASGOW CALEDONIAN

BOA CASTING COURSE
The combined profile of GCU School and the aspirations of the BOA Casting Committee and the AOP Makes us natural bed fellows
2011 Joint Award the Joint Award commenced September 2011
Today — Academic credits
Tomorrow — Professional Recognition & Qualification

GLASGOW CALEDONIAN UNIVERSITY
Awarding BCC 60 Credits at University Diploma Level (SCQF 8/NQF 5)
The content was modified this guarantees content which was updated to reflect current practices.
Additional assessment strategies & modifications to clinical examinations processes.

TRAINEES
Minimum of 1 full year of casting experience prior to attendance on approved course. Now takes a minimum of 20 months to achieve the qualification & to become a BCC Holder.

ACCREDITATION FOR TRAINEES
1. Record of Clinical Achievement & Reflection on Learning in Practice.
2. Supervised Practice & Log Book completed by a BCC Holder.
3. Mentor.
4. Reflections completed by Trainee showing Learning.
5. The Course either 5 week full time or 6 Month Day Release.

WWW.AOP-UK.COM
Followed by Objective Structured Clinical Examination (OSCE)  
The exam held at the Royal National Orthopaedic Hospital Stanmore Middlesex  
**OSCE Practical** consists of  
1. Preparation Station—Notes  
2. Practical Station—Casts  
3. Documentation Station—Write Up Notes  
**Total Time 1 hour approximately**  
**OSCE Oral** 15 minutes with an Orthopaedic Consultant  
3000 word Case Study which is completed during and following the day release courses or completed only after following the 5 week full time courses. Full qualification of BCC + 60 Credits only awarded on successful completion of all elements.

**PROGRESS SEPT 2011 TO 2013**

**GROUPS**

**STANMORE COURSE GROUP**—4 Completed (2 more writing assignments at this time)  
**BRADFORD OCT-MAR 2012-2013 Completed**  
**GLASGOW OCT-MARCH 2012 Completed**  
**NEWPORT DEC-MAY 2012 Completed DEC-MAY 2013 (writing assignments)**

**RESULTS**

To achieve success prepare for the course.  
Support Important—Local Mentor.  
Use the support we offer.  
Follow the Milestones/Timings.

**RECOGNITION OF PRIOR LEARNING (RPL)**

Available to Senior & Experienced Orthopaedic Practitioners who are currently BCC Holders on the Active Register.

**3 ROUTES**

1. Follow Assignment Strategy of Course.  
2. Provide tailored Evidence to support Attainment of course learning outcomes.  
3. Evidence of Senior Role in Casting e.g Teaching Exam, BOA Examiner, Manager of Clinical Area.

**6 LEARNING OUTCOMES**

1. Demonstrate an understanding of the legislation, guidelines, codes of practice & policies relevant to the assessment & management of fractures & soft tissue injury.  
2. Compare and contrast local fractures, soft tissues services with other national providers  
3. Access relevant literature, research & evidence to inform fracture & soft tissue management.  
4. Recognise when there is a need to refer a patient to a more experienced colleague.  
5. Evaluate own strengths & weaknesses, acknowledge limitations of competence & recognize the importance of maintaining & developing competence related to the immobilization of fractures & soft tissue injury.  
6. Reflect on personal contribution as a member of the multidisciplinary team.
You can also Produce a Personalized Portfolio of Evidence CV & Work Diary. Personalized Evidence to show you meet the 6 Learning Outcomes above or Produce a Portfolio of Evidence with
1. CV & Work Diary.
2. Learning Log.
3. 3000, Word Assignment.

A successful claim will result in you being awarded the 60 Academic credits at University Diploma Level. Scottish Credit & Qualification Frame Work Level 8 /England Level 5.
The 60 Credits in themselves are not a Full University Qualification or Award but may be able to be used as part of an Award or Qualification towards a Full Diploma / Degree.

THE IMPACT OF ACCREDITATION
It’s a Very Strong Quality Assurance Message.
The Course is of a specific standard (Academic & Professional).
It protects Orthopaedic Practitioners, employer & public, Confirms ‘Fit for role’, fulfils political, managerial & strategic objectives.
Use—as part of diploma/degree that already exists the potential to start a new qualification for Orthopaedic Practitioners.

BUT SO MUCH MORE
Organisational imperative it offers Life Long Learning LLL, expected & managed through Agenda for Change (AFC) The Knowledge & Skills Framework (KSF). Offers CPD to links to Personal Development Planning (PDP)

COURSE AND RECORD OF PRIOR LEARNING (RPL)
Opportunity to drive up standards & Patient care upwards.
Recognize & reward past & present practices in ‘good’ casting.
Has the potential to motivate, capture and then keep capturing future knowledge creation, acquisition, utilization, transfer & indeed aspiration for casting & all who work in the area.

CONTACT
m.wright@gcu.ac.uk
or
orthopaediccasting@gcu.ac.uk

WWW.AOP-UK.COM
REGULATION OF ORTHOPAEDIC PRACTITIONERS

The Health & Care Professions Council was know as (HPC) They have been taken over by a New Body – Professional Standards Authority (PSA)
They are accepting Voluntary Registers

However !!!!

1. There are poor numbers on the BCC Register.
2. Legal Costs we must be able to defend cases in court.
3. Costs of Accreditation with the Professional Standards Authority
   there is a set up fee & then an annual fee.
   Set up fee is £9,000-00p then a yearly amount is set.

IS IT A GOOD IDEA OR NOT?

Will a Voluntary Register help us to achieve mandatory qualification?
The (BOACC) British Orthopaedic Association Casting Committee intends to continue to
lobby for acceptance as a profession.
The BOACC will continue to investigate the possibilities.

HOW CAN YOU HELP?

You must keep yourselves on the active register of BCC Holders held at the BOA in
London.
Numbers are essential.

We have no power if YOU do not remain on the register.
50% of Orthopaedic Practitioners are not on the register.

BOA REGISTER OF BCC HOLDERS

Have you moved or changed your name?
If so contact the data-base holder with address and details at
recert@boa.ac.uk
or
01803 655136 (Paul Adamson)

COURSE INFO

Www.boa.ac.uk/en/casting/information
AOP 2014 CONFERENCE TASTER

The conference for 2014 will be held in Nottingham from the 20th to 22nd June 2014 at the De Vere Venues East Midlands Conference Centre & Orchard Hotel Beeston Lane University Park, University of Nottingham, Nottingham NG7 2RJ.

I have waited a very long time for the AOP-UK to come to Nottingham so I am really excited about it.

- The City of Nottingham is known as the Queen of the Midlands.

Our city is of course known world wide for our connections to Robin Hood and the Sherriff of Nottingham.

Nottingham Forest Football Club started in 1865 locally known as the Reds they are also one of only 7 Football Clubs to retain the European Cup twice under Brian Clough Manager he is known as the greatest England Manager that never was.

Notts County Football Club is the Oldest Football Club in the World started in 1862 locally nicknamed the Magpies.

WWW.AOP-UK.COM
AOP 2014 CONFERENCE TASTER

The legendary Torvill & Dean the world famous Ice Skaters brought you the quintessential ice dance the Bolero and were the only ones to score 6.0 from all the judges and won the Gold medal in the 1984 Olympics.

Trent Bridge is Home to the Nottinghamshire County Cricket Club.

Wollaton Hall & Deer Park is now famous around the world as it was used as Wayne Manor in the latest Batman Film.

Ye Olde Trip to Jerusalem Inn 1189 AD is the oldest Inn in England it is built into the walls of Nottingham Castle. There is a hole in the ceiling of the upper bar the Ward Room that goes up to the castle, it is only in recent years that it has been blocked off. I did my nurse training in Nottingham and can remember when the wind blew down the hole the sandstone used to end up in your beer. There is also a galleon in a sealed case which is said to be haunted. More to come in next issue
AOP CONFERENCE 2013 LECTURE

The Second Lecture on Friday was given by Scott Parker
DO CATS GET SORE FEET?
GAIT AND SOFT TISSUE PATHOLOGY OF THE FOOT AND ANKLE
SCOTT PARKER WESTON GENERAL HOSPITAL WESTON SUPER MARE

On being asked to do a lecture the question posed was
What do big feet mean? And Do cats get sore feet? So here is the result.

OUTLINE
1. SOFT TISSUE INJURY
2. FUNCTIONAL ANATOMY
3. ANKLE SPRAINS
4. ACHILLES INJURIES

THE FOOT
3 Main things it does
1. Supports Weight Bearing
2. Propulsion
3. Shock Absorption
Cats actually weight bear on their Digits not their heels

ANATOMY
28 BONES
31 JOINTS
3 ARCHES
LIGAMENTS MUSCLES are INTRINSIC & EXTRINSIC
4 MAIN NERVES
2 MAIN ARTERIES
9 COMARTMENTS
26.3CM is the AVERAGE MALE LENGTH of FOOT

THE HINDFOOT
1. Forms Hinge Joint with Ankle
2. Dorsiflexion for Heal Stance, Stance Phase—Shock Absorption
3. Most Stable in Dorsiflexion, due to Joint Shape & Ligament
4. Plantarflexes for Toe Off Propulsion

THE MIDFOOT
1. Controls relationship between Forefoot & Hindfoot
2. Allow Gliding & Rotation to keep Foot in contact with the Ground on Uneven Surfaces
3. Very strong Plantar Ligaments
4. Joints lock to form Rigid Lever when force applied to calf muscles
5. Stores Energy from Stride to Stride

WWW.AOP-UK.COM
ANKLE LIGAMENTS
Lateral Side
ATFL = Anterior Talo Fibular Ligament
PTFL = Posterior Talo Fibular Ligament
CFL = Calcaneo Fibular Ligament
Medial Side
Deltoid Ligament

INCIDENCE
50-60 per 10,000/yearly
300,000 a year in UK
85-90% Lateral sprains = Inversion Injury
5% Medial Sprains = Eversion Injury
6% High (Synodesmotic) Sprain = External Rotation Injury
10-40% Instability following Acute Injury

MECHANISM OF INJURY
FASHION = HIGH HEELS
Joint position ATFL taught
Increased movement arm
Increased risk sprain
Sprain anterior to posterior ligaments
Cats Digrade as cats walk on toes so when in high heels you are walking like a cat

MECHANISM OF INJURY
SPORT
High energy
CFL taught in neutral
Multiple Ligament Injuries
Landing injury
CFL = Calcaneo-Fibular Ligament

ALCOHOL
Mechanism of Injury + Alcohol
**AOP CONFERENCE 2013 LECTURE**

**GRADES OF INJURY**

<table>
<thead>
<tr>
<th>GRADE I</th>
<th>GRADE II</th>
<th>GRADE III</th>
</tr>
</thead>
<tbody>
<tr>
<td>STRETCH</td>
<td>PARTIAL TEAR</td>
<td>COMPLETE TEAR</td>
</tr>
<tr>
<td>CAN WEIGHTBEAR</td>
<td>DIFFICULT TO WEIGHTBEAR</td>
<td>UNABLE TO WEIGHTBEAR</td>
</tr>
<tr>
<td>MILD SWELLING</td>
<td>BRUSING</td>
<td>SEVERE BRUSING OFTEN MULTIPLE LIGAMENTS</td>
</tr>
</tbody>
</table>

**TREATMENT**

PRICE
Protection
Rest
Ice
Compression
Elevation

**TREATMENT FOR GRADES**

Grade I = Tubigrip

Grade II = 10 days in a Cast, Semi Rigid Brace, 4-6 Weeks Functional Rehabilitation

**FUNCTIONAL REHABILITATION**

1. Joint is kept in use while protected from further use
2. Early Weight Bearing
3. ROM = Range of Movement Exercises
4. Muscle Stretches
5. Muscle Strengthening
6. Proprioceptive Training
7. Activity Specific Training 6 to 8 weeks

**LIGAMENT HEALING**

<table>
<thead>
<tr>
<th>MOBILITY</th>
<th>IMMOBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCREASED STRENGTH</td>
<td>DECREASED STRENGTH</td>
</tr>
<tr>
<td>BETTER ORIENTATION OF FIBRES</td>
<td>DECREASED STIFFNESS</td>
</tr>
<tr>
<td>MAINTAINS MUSCLE &amp; PROPRIOCEPTION</td>
<td>MUSCLE ATROPHY STIFFNESS</td>
</tr>
</tbody>
</table>

WWW.AOP-UK.COM
ANKLE INSTABILITY

<table>
<thead>
<tr>
<th>MECHANICAL INSTABILITY</th>
<th>RECURRENT ANKLE SPRAINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNCTIONAL INSTABILITY</td>
<td>GIVING OUT</td>
</tr>
<tr>
<td></td>
<td>INABILITY TO RESUME SPORTS</td>
</tr>
<tr>
<td></td>
<td>NOT CHRONIC PAIN</td>
</tr>
</tbody>
</table>

DIAGNOSIS
Talar Draw Test >8mm or 3mm more than the other side
ATFL Injury
ANTERIOR TIBIO FIBULAR LIGAMENT
Talar Tilt Stress X-Rays
79 degrees
ATFL & CFL Injury
ANTERIOR TIBIO FIBULAR LIGAMENT & CALCANEAL FIBULAR LIGAMENT
Joint space is widened Laterally demonstrated by an Antero-Posterior Radiograph of the Ankle Joint with Forced Inversion

CHRONIC INSTABILITY
1. Physiotherapy-Functional Rehabilitation
2. Taping
3. Bracing
4. Should be undertaken for 2-3 months before review

SURGERY
1. >20 Different Operations
2. Brostrom Operation = re-approximate Lateral Ligaments
3. 4-6 weeks in a Weight Bearing Plaster Cast
4. Functional Rehabilitation
5. 87-95% Success rates

SUMMARY
1. Consider cast Only for Grade III
2. Cast > 4 weeks detrimental
3. Functional Rehabilitation Best Treatment :
   Time to return to sport
   Ability to return to sport
   Shorter time to return to work
   Fewer had objective instability on X-Ray
   Improved patient satisfaction

WWW.AOP-UK.COM
ACHILLES TENDON
1. Strongest Tendon
2. Connects Gastrocnemius & Soleus to Calcaneus
3. 15cm Long
4. Blood Supply from Musculotendinous Junction
5. Sural Nerve

THE GASTROCNEMIUS, SOLEUS & ACHILLES TENDON

THE GASTROCNEMIUS  A Greek Word Meaning Gaster=Stomach + Kneme=Leg.
The Gastrocnemius is part of the Muscle known as Triceps Surae.
It forms the Belly of the Calf.
It has Two Heads Medial & Lateral which are connected to the Condyles of the Femur by strong Flat Tendons.
Medial Head starts at the Lower Posterior Surface of the Femur above the Medial Condyle.
Lateral Head Starts at the Lateral Condyle & the Lower Posterior Surface of the Femur.
They Insert into the Posterior Surface of the Calcaneus (Heel Bone) via the Calcaneal Tendon (Achilles Tendon) which is a fusion of the Tendons of Gastrocnemius & Soleus.
It is supplied by the Tibial Nerve S1 & 2.
The Nerve is also Known as the Sural Nerve.

WWW.AOP-UK.COM
AOP CONFERENCE 2013 LECTURE

THE SOLEUS A Latin Word meaning Sole-Shaped like the Fish.
The Soleus is part of the Muscle known as Triceps Surae.  
The Soleus is broad flat muscle situated immediately Deep or Anterior to the 
Gastrocnemius.  
It starts at the Upper Posterior Surfaces of the Tibia & Fibula. 
From the Back of the Head & the Upper Fourth of the Posterior Surface of the Fibula, 
from the Soleal Line & the Middle Third of the Medial Border of the Tibia, & from 
a Fibrous Band between the Tibia & Fibula which Arches over the Popliteal Vessels & 
Tibial Nerve.  
It inserts with the Gastrocnemius via the Calcaneal Tendon into the Posterior Surface 
of the Calcaneus (Heel Bone). 
It is supplied by the Tibial Nerve L5, S1 & 2.

THE ACHILLES TENDON
The AchillesTendon also known as The Tendo Calcaneus. 
It is the thickest and strongest human tendon.  
It arises near the Middle of the Leg its Anterior Surface receives muscle fibres from the 
Soleus Almost to its Lower End.  
It becomes Rounded 4cm above the Calcaneus below it expands & is attached to the 
Posterior Surface of the Calcaneus at the Mid Level, a bursa separates it from the Upper 
part of the Surface.  
The Tendon Fibres spiral through 90 degrees in descending & the Medial Fibres become 
the most Posterior. 
This permits some degree of Elongation, Elastic Recoil & storing of Energy in the Tendon 
which can be released at an appropriate phase of locomotion.  
It is supplied by the Sural Nerve.

WWW.AOP-UK.COM
THE SURAL NERVE

The Sural Nerve descends between the Two Heads of the Gastrocnemius piercing the Deep Fascia in the Middle or Upper Part of the Back of the leg. It is joined by the Sural Communicating Branches of the Common Peroneal Nerve. It then passes downwards near the Lateral Margin of the Achilles Tendon, close to the small Saphenous Vein between the Lateral Malleolus & Calcaneus. It supplies the Skin of the Lateral & Posterior Part of the Lower 1/3rd of the Leg. It runs forwards below the Lateral Malleolus & continues along the Lateral Side of the Foot & Little Toe, communicating on the Dorsum of the Foot with superficial Peroneal Nerve.

ININCIDENCE

Male = 7.3/100000
Female = 4.7/100000
Peak = 30—49 years old
75% are Sports related
Push off injury Increasing Incidence

RISK FACTORS

Sports—change in activity level
Age
Previous Rupture
Steroid Use
Ciprofloxacin (Anti-Biotic)

WWW.AOP-UK.COM
AOP CONFERENCE 2013 LECTURE

DIAGNOSIS

History—Short / Kicked in the Ankle
Painful Palpable Gap
US/MRI = US=Ultrasound      MRI= Magnetic Resonating Imaging
25% missed at 1st visit

TREATMENT

Cast Protocol (6 to 8 weeks)
Functional Bracing
Percutaneous Repair
Mini Open repair
Open repair

TREATMENT

<table>
<thead>
<tr>
<th>WEEKS</th>
<th>TRADITIONAL CAST</th>
<th>OPERATIVE</th>
<th>FUNCTIONAL REHABILITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 TO 2</td>
<td>EQUINUS CAST NWB</td>
<td>EQUINUS B/S NWB</td>
<td>EQUINUS CAST NWB</td>
</tr>
<tr>
<td>2 TO 4</td>
<td>40 PLANTAR FLEXION NWB</td>
<td>BOOT+2CM HEEL RAISE</td>
<td>EQUINUS BRACE PWB</td>
</tr>
<tr>
<td>4 TO 6</td>
<td>20 PLANTAR FLEXION NWB</td>
<td>BOOT + 2CM HEEL RAISE FWB</td>
<td>REDUCE BRACE 10/ WK FWB</td>
</tr>
<tr>
<td>6 TO 8</td>
<td>NEUTRAL CAST 20% WB</td>
<td>REMOVE HEEL RAISE FWB</td>
<td>REDUCE EQUINUS 10/WK FWB</td>
</tr>
<tr>
<td>+ 8</td>
<td>HEEL RAISE</td>
<td>WEAN OFF BOOT</td>
<td>WEAN OFF BOOT</td>
</tr>
<tr>
<td>RE RUPTURE RATE</td>
<td>13%</td>
<td>2-5%</td>
<td>2.7-4.6%</td>
</tr>
</tbody>
</table>

TENDON HEALING

<table>
<thead>
<tr>
<th>MOBILITY</th>
<th>IMMOBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCREASED STRENGTH BETTER ORIENTATION FIBRES</td>
<td>DECREASED STRENGTH DECREASED STIFFNESS</td>
</tr>
<tr>
<td>MAINTAINS MUSCLE &amp; PROPRIOCEPTION</td>
<td>MUSCLE ATROPHY STIFFNESS LOSS PROPRIOCEPTION</td>
</tr>
</tbody>
</table>
AOP CONFERENCE 2013 LECTURE

RESULTS

<table>
<thead>
<tr>
<th>TRADITIONAL VIEW</th>
<th>CURRENT EVIDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPERATIVE TREATMENT</td>
<td>NO STRENGTH BENEFIT FROM SURGERY COMPARED WITH FUNCTIONAL BRACING</td>
</tr>
<tr>
<td>DECREASES RUPTURE</td>
<td></td>
</tr>
<tr>
<td>OPERATIVE TREATMENT</td>
<td>FUNCTIONAL BRACING DECREASES RE-RUPTURE RATE</td>
</tr>
<tr>
<td>INCREASES STRENGTH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIGHER COMPLICATIONS WITH SURGERY</td>
</tr>
</tbody>
</table>

COMPLICATIONS
Surgery has one extra complication per 7 operations
Ulcers can occur over the Achilles Tendon Area

CURRENT THOUGHTS
US/MRI for diagnosis
Aggressive Functional Rehabilitation Optimum
Early Movement Good
Some W/B Good
Surgery for Open Injury & Re-Rupture
Surgery if you do not offer Functional Rehabilitation
The Injured side is always worse than the un-injured side whatever the treatment

SUMMARY
Achilles tendon Rupture incidence is Increasing
Aggressive Functional Bracing is Optimum
Surgery has limited indications
Cats do get Achilles Tendon Ruptures Too

CONCLUSIONS
Short Cast Immobilisation for 10 days then early Functional Rehabilitation for Ligaments & Tendons Injury
AOP CONFERENCE 2013 WORKSHOPS

BREAKOUT WORKSHOP SESSIONS
This year there were 8 Breakout Sessions.

1. AOP-UK WORKSHOP
MUSCULOSKELETAL EXAMINATION
Mrs Jenny Walker
Bsc Hons, PG Cert MED. Education, Dip CPC, RGN
Jenny introduced the principles & discussed the common elements of
musculoskeletal examination
Participants were able to identify the importance of clinical examinations
and understand the steps of how to perform a basic examination of a
joint.
It was a very interesting workshop & a lot of fun was had by all.

2. BEAGLE ORTHOPAEDIC WORKSHOP
WEIGHT-BEARING THROUGH A NON-WEIGHT BEARING CAST
Bryan Percival & Anne Marie
Gibson Beagle Orthopaedics, General & Area Sales Managers
The aim was to educate all delegates to the concept of the traditional
Bohler Iron & it’s uses
Appreciate the theory
Be familiar with the new features of the Beagle Bohler Walker which
incorporates a broad walking base to encourage a normal Heel—Toe Gait.
Interesting Product.

COMING IN NEXT ISSUE

More BREAKOUT WORKSHOP SESSIONS

More AOP CONFERENCE 2013 LECTURES

HOW CLEAN IS YOUR PLASTER ROOM?

WRIST INJURIES—IT’S MORE THAN A COLLES

WWW.AOP-UK.COM
AOP CONFERENCE 2013 PHOTOS

EVEN MORE CONFERENCE 2013 PHOTOS

WWW.AOP-UK.COM
AOP CONFERENCE 2013 PHOTOS

MANY THANKS TO BENECARE FOR USE OF PHOTOS

WWW.AOP-UK.COM
MEMBER DETAILS (Please let me know if your details change ASAP at address shown below)

New Member: Yes__No__     Current Member ID Number: _______________

Title: __________________       Date of Birth: ___________________________

First Name: ______________________ Surname: ________________________

Home Address: ____________________________________________________

____________________________________________________________

Town/City: _______________________________ Post Code: ______________

Home Telephone Number: ___________________________________________

Mobile Telephone Number: __________________________________________

Home E-Mail Address: ______________________________________________

Your Qualifications: ________________________________________________

Hospital Address: __________________________________________________

Town/City: _______________________________ Post Code: ______________

Hospital Telephone Number: _________________________________________

Hospital E-Mail Address: _____________________________________________

SUBSCRIPTION FEES

Membership Payment Enclosed : £20-00p One Year ____________________
Membership Payment Enclosed : £50-00p Three Years _________________
Membership Payment Enclosed : £10-00p Retired Members Only _________
Membership Payment Enclosed : £5-00p Each Badges, Lanyards __________
Total Amount Enclosed: £________________________________________

PLEASE PAY IN GB STERLING ONLY

Please complete and return this form with your subscription Payable to “AOP-UK”
send it to

MEMBERSHIP SECRETARY Darlene Anne Lathall 9 Windsor Court Sandiacre Notts NG10 5PH

Signed: ___________________________       Date: _______________________

All AOP Information, Journals and Newsletters will be sent out to the details given.
Let us know ASAP if your details change so you do not miss out on anything.
All Information, Updates and Events can be found on our WEB PAGES

WWW.AOP-UK.COM
AOP CONFERENCE 2014

AOP CONFERENCE 2014
20th to 22nd JUNE 2014

THE 2014 AOP CONFERENCE WILL BE HELD AT
DE VERE VENUES EAST MIDLANDS CONFERENCE CENTRE &
ORCHARD HOTEL BEESTON LANE UNIVERSITY PARK,
UNIVERSITY OF NOTTINGHAM,
NOTTINGHAM NG7 2RJ

IT’S THE PLACE TO BE IN 2014 BOOK NOW ON THE AOP WEBSITE

WWW.AOP-UK.COM
Would you like to contribute to the AOP Newsletter

This Newsletter is for you the members by contributing you will be giving old and new members your experience and wisdom in all things Trauma and Orthopaedics

See your work in print it can be used for your Continuing Personal Development Profile

If you need help you only have to ask us

AOP WEBSITE ADDRESS
WWW.AOP-UK.COM

MORE OF THE AOP 2014 CONFERENCE TASTER WILL BE IN NEXT ISSUE DON’T MISS IT
MORE INFO ON 2013 AOP CONFERENCE
MORE ARTICLES IN NEXT ISSUE
ARE YOUR COLLEAGUES MEMBERS OF THE AOP-UK
IF NOT WHY NOT?

DO YOU KNOW THE ACADEMICALLY RECOGNISED BRITISH CASTING CERTIFICATE BEARS OUR NAME ASSOCIATION OF ORTHOPAEDIC PRACTITIONERS ALONG WITH GLASGOW CALEDONIAN UNIVERSITY AND THE BRITISH ORTHOPAEDIC ASSOCIATION

CHECK THE AOP-UK WEBSITE FOR UP AND COMING STUDY DAYS IN YOUR AREA

DON’T MISS THE NEXT ISSUE

In the next issue more on casting
New Series on A&E/ED Backslabs

WHAT DO YOU THINK OF THE NEW THE ORTHOPAEDIC PRACTITIONER NEWSLETTER?

Let us know what you would like to see in the next issue

COPYRIGHT DARLENE ANNE LATHALL THE ORTHOPAEDIC PRACTITIONER ONLINE NEWSLETTER SEP / OCT 2013