

B IOMECHANICS OF THE LOWER LIMB— two day course

Alison Middleditch, MCSP MMACP *Director Surrey Physiotherapy Clinic*

Alison qualified from Kings College Hospital in 1977 and became a member of the MACP in 1981. She was secretary of the MACP for 5 years and also was a tutor and examiner for the Organisation. She, also, held a five year Research Post at Bioengineering Department University College, London and lectures extensively throughout the United Kingdom and overseas. Alison has had a number of articles published including a chapter on hypermobility. She has a particular interest in treatment of adolescence with joint hypermobility. She is author of Functional Anatomy of the Spine, published in 2005.

Publications

Functional Anatomy of the Spine, 2nd Edition (2005) Elsevier

Chapter in: Hypermobility Syndrome (2003) Keer and Grahame, Butterworth Heinemann

Articles in Physiotherapy and In Touch

Lectured extensively both nationally and internationally

Lecture at The World Congress of Physiotherapy 1991

Guest Lecturer at The Manipulation Association of Chartered Physiotherapists Annual Conference; 1990 and 1994

Guest Lecturer at the OCPPP (Organisation of Chartered Physiotherapist in Private Practice) on three occasions

Aims:

1. To identify biomechanical mal-alignments in the lower limb and to relate findings to common lower limb pathologies i.e. Achilles tendonitis, sprained ankle, shin splints.
2. To teach participants to identify common foot deformities and to evaluate evidence base for treatment.
3. Enable participants to identify when the prescription of an orthosis may be appropriate and when to refer a patient to a podiatrist.
4. To enable participants to identify the effect of abnormal foot biomechanics on the knee and hip.
5. To provide the skills to enable functional reconditioning of muscle weakness associated with abnormal biomechanics.
6. To observe the biomechanics of walking and running.
7. To identify and discuss leg length inequalities.

**Venue: Physiotherapy Department
West Berkshire Community Hospital
London Road
Thatcham
Berkshire
RG18 3AS**

Date: SATURDAY 22ND & SUNDAY 23RD MAY 2010

Attached: Programme/Directions

BIOMECHANICS OF THE LOWER LIMB

WEST BERKSHIRE COMMUNITY HOSPITAL SATURDAY 22ND & SUNDAY 23RD MAY 2010 PROGRAMME

Day 1

- 8.45 am **Registration**
- 9.00 am LECTURE
How normal and abnormal biomechanics of the foot affect lower limb alignment and function.
- Anatomy and biomechanics of the foot and ankle
 - Common foot deformities and their compensation mechanisms– assessment, evaluation and management.
- 10.30 am **Coffee**
- 10.50 am PRACTICAL
Assessment of lower limb alignment.
Biomechanical alignment
Common foot deformities
- 1.00pm **Lunch**
- 2.00pm PRACTICAL
Manual testing of the talocrural, subtalar and midtarsal joints
Management of foot and ankle dysfunction
Taping techniques
- 3.30pm **Tea**
- 3.50 DISCUSSION AND DEMONSTRATION.
What are orthoses?
Indications and contraindications for the use of orthoses.
Footwear
Choosing the right shoe
- 4.30pm **Finish**

BIOMECHANICS OF THE LOWER LIMB

**WEST BERKSHIRE COMMUNITY HOSPITAL
SATURDAY 22ND & SUNDAY 23RD MAY 2010**

PROGRAMME

Day 2

9.00 am LECTURE

How abnormal biomechanics of the hip and knee affect lower limb dysfunction.

Faulty movement patterns in the hip and knee.

- Femoral anterior glide syndrome
- Piriformis syndrome
- ITB/TFL syndrome
- Bursitis
- Patellofemoral problems

10.30am **Coffee**

10.50am PRACTICAL

Examination of the hip related to abnormal biomechanics in the lower leg

Functional muscle weaknesses in the hip and lower limb

Muscle reconditioning using functional patterns

12.30pm **Lunch**

1.15pm Management of leg length inequality

2.00pm PRACTICAL

Biomechanics of gait and running

Problem solving

4.00pm **Finish**

Participants are asked to bring the following:

Shorts / Trainers/ Sports specific shoes e.g. astro boots, football boots, golf shoes. Well worn shoes

DIRECTIONS TO WEST BERKSHIRE COMMUNITY HOSPITAL NEWBURY

For further directions/instructions please download map.

http://www.royalberkshire.nhs.uk/how_to_find_us.aspx

West Berkshire Community Hospital is easily located approximately two miles east of Newbury at Turnpike, on the A4 between Newbury and Thatcham.

By Car:

There are two road entrances to the Hospital:

The South Entrance is located directly off the A4 and may only be accessed by vehicles coming from Newbury and turning left into the site. No right turn is possible from the Thatcham direction.

The North Entrance and exit has unlimited access and is located on Turnpike Road, off the Garden Centre roundabout on the A4.

Car Parking:

Pay and Display car parking is available at the hospital, as well as designated spaces for disabled parking, motor cycles and bicycles. There is also a Drop Off point and a taxi rank near the Main Entrance.

By Bus:

There are regular bus services from both Newbury and Thatcham which stop at the hospital.