



MACP Integrating Imaging into MSK Practice – Hip and pelvis

Facilitators

Amie Coombs MSc, BSc (Hons), MCSP, HCPC

Neil Stewart MSc, BSc (Hons), MMACP, MCSP, HCPC



Course length: 1 full day

Course Outline: Are you a new FCP or APP who requests or would like to start requesting imaging and feel overwhelmed when looking at pelvic and hip imaging? What do they mean by normal? How do these results impact my patient? What if the X-Ray does not fit your patient clinically? We hope to answer all your questions by developing the necessary tools to systematically interpret these images and decipher this potentially complex area.

The integrated imaging course for the hip and pelvis is a 1-day course aimed at AP/FCP's with the desire to develop their skills in the management of patients with hip pain. It is also appropriate for senior MSK clinicians with limited or no imaging experience. It will provide guidance on requesting, more advanced interpretation of hip and pelvis imaging and how to utilise this information for best patient care. It is currently virtually run with interactive case studies, clinical discussion, break out groups, polls, and question and answer sessions with up-to-date evidence-based practice to support the information provided. These case studies will be used to introduce key theoretical concepts that are important when interpreting hip radiology. It is mapped to the FCP roadmap and core capabilities framework. It can be taken as a one-day stand-alone course if a specific area is only needed to be covered for the participant, or could be integrated with the knee, shoulder and lumbar spine.

Learning Objectives/Aims

By the end of the course(s) you will:

- Know the indication for requesting basic imaging for the hip and pelvis
- Have a structured method of looking at and interpreting images
- Understand where imaging plays a role clinically and pit falls and advantages in the use of imaging and patient care
- Have an understanding of what is normal and what is abnormal in these images
- Have an idea of resources to help you develop your skills
- Discuss how you interpret imaging, imaging reports and how you discuss this with your MSK patients

You will not:

- Be legally qualified to request radiology
- Be legally covered to interpret radiological examinations or write imaging reports
- Know everything about imaging these anatomical areas

The structure of the day includes:

Flexible timetable

- 9.00. Introduction to day; aims, objectives and IRMER competencies discussed
- 9.30 Pelvic and hip anatomy overview, indications to x- ray and what radiographic techniques to request
- 11.00 Break
- 11.15 Pelvic and hip x- ray interpretation including basics, lines and pelvic position. Acetabular retroversion including cross over sign, iliac spine sign, and posterior wall sign, and acetabular depth.
- 12.00 Determining structural instability on imaging, and the natural history of osteoarthritis in this patient group. How we interpret osteoarthritis in a pelvic x- ray and what does this mean for our patients
- 13.00 Lunch
- 13.30 Introduction to femoroacetabular impingement on x- ray, causes and how our patients present, and when to image. Stages of AVN on x-ray and MRI. MRI interpretation including physics, sequences and anatomy
- 15.15 Break
- 15.30 MRI THR
- 16.00 Wrap up (discussion)
- 16.30 Finish

Resources:

- Delegates will have access to a workbook that would include:
- Images/summaries of course including anatomical pictures/case studies
- Summaries of each pelvic/hip interpretation tool – normal ranges/ranges indicating pathology and how this is clinically relevant for your patients
- Case histories & questions/answers
- Resources reference list and further CPD advice

- National guidelines for management/investigations/IRMER regulations
- Reading List/Bibliography
- Signposting of online resources

Learning methods:

- Video analysis of patients
- Presentation / discussion
- Break out rooms
- Clinical case studies
- Interactive activities

Presenters

Neil Stewart:

Neil started his Advanced Practice career working in Accident and Emergency at Worthing Hospital over 10 years ago. He now works for Sussex Community NHS Foundation Trust as an Advanced Practice Physiotherapist specialising in the management of patients with lumbar, hip and knee pain and as a first contact practitioner where he enjoys mentoring FCP practitioners. He completed his MSc at the University of Brighton to gain his MACP membership and now supervises post graduate MSc students from the University of Hertfordshire and University of Brighton. Neil is also educational lead for the AP and physiotherapy teams.

Neil has developed an interest in the management of hip pathology throughout his AP career and has benefited from working alongside Orthopaedic Consultants and Radiologists across Coastal West Sussex. He particularly enjoys being able to apply his knowledge and understanding of image interpretation of the pelvis, when rehabilitating patients with hip pathology in physiotherapy. He lives in the South Coast and enjoys surfing when there is a wave, SUP'ing when it is flat, and mountain biking when he can't get out in the water.

Amie Coombs:

Amie is an Advanced Physiotherapy Practitioner specialising in the lower quadrant including lumbar, hip and knee pain. She additionally works as a First Contact Practitioner for Sussex Community NHS Foundation Trust. She has a keen interest in the hip and pelvis, which has been developed over the last 9 years through her experience of working alongside the Orthopaedic Consultants and Radiologists. Following the completion of her lower quadrant module and ESP module including radiology interpretation, and having experienced hip pain personally through competitive running she developed a passion and drive to excel in the interpretation of hip and pelvic interpretation and using this vital skill in the best patient care for her patients.

Amie has also worked at the University of Brighton lecturing to MSc students and is retained to develop this further in the near future.

Her personal interests are in long distance running, snowboarding, climbing and she has competed in many ultramarathons.

Cost of course:

The cost for the participant will be:

£120 for MACP members

£150 for non-members

This is the cost for 2022 and will be reviewed annually.

There is one free space available to whoever organises the course locally. In addition, one further free space will be offered if more than 30 delegates book onto the course.

If a venue fee is incurred the minimum number of people required to run the course may increase. The minimum number of delegates required to qualify for an additional free place may also increase.

The course requires a minimum of 18 bookings to enable the MACP to cover expenses and will be cancelled 6 weeks prior to the commencement of the course if this number has not been reached.

If the course requires air travel (outside England) for the lecturers the prices quoted / number of bookings required will need to be adjusted to reflect the additional costs.

What the MACP Provides:

- Tutors for delivering the courses
- Pays the accommodation for the tutor(s)
- Pays tutors(s) travel
- Administers the course, taking all bookings and sending all applicants pre-course information.
- £3 per person / day to cover refreshments (tea/coffee/biscuits etc).
- Advertising in: MACP website and social media sites, MACP newsletters.
- One copy of a flyer that you may use to circulate and advertise the course
- A list of names of those who have booked prior to the course for registration.
- CPD certificates (online) Tutors for delivering the course:
- Administers the course, taking all bookings and sending all applicants pre-course information

You will need:

A lecture theatre/ large room that will seat 40 people

AV equipment (data projection or overhead projector). Plus access to plugs as workbooks are electronic.

Provide us with local information re directions how to get to venue, parking, local accommodation list.

Someone to work on local promotion (including SoMe) to help to ensure that at 6 weeks before the course, the minimum numbers of places are booked onto the course.

Someone on the on the day to deal with local venue organization (AV, putting up signs, providing refreshments, information about where to get lunch, registering delegates, locking up, this may also include picking up or dropping off tutors from their hotel; taking pictures on the day for SoMe)

Refreshments as appropriate (to be reimbursed by MACP on production of original receipts – up to £3 per day per person)

PRE-COURSE PREPARATION

1. Anatomy of the hip and pelvis
2. Common pathologies affecting the region, their clinical presentations and their time frame for recovery. A good patient mileage in MSK management of the area.
3. Awareness of management pathways for common conditions

Learning Outcome	How delivered	RoadMap Capability
1.To understand the legal framework with respect to requesting and interpreting of radiological investigations	Interactive Lectures Pre and post course reading	B5
2. To understand the responsibility of a requester including A; Exposure to ionising radiation, B; awareness of indications and contra-indications for MRI C; Adequate information on requesting form D; To act on the Imaging results	Interactive Lectures Pre and post course reading Clinical reasoning through case studies	B 3 4 5 C 11 12 13
3. To understand the role of Imaging for hip/pelvic pain patient's to aid clarity of working diagnosis This will involve communication of both beneficial and negative effects of imaging, and guidance on communicating image findings/results to our patients	Interactive Lectures Pre and post course reading Clinical reasoning through case studies Shared clinical experiences	A1 B 3,4,5 C 11 12 13 D14
1.To Understand The Role of Imaging (XR, MRI, MRA, US and CT, NM bone) in the evaluation and management of MSK hip and pelvic pain and a person centred approach for best care	Interactive Lectures Quiz format/polls Pre and post course reading Clinical reasoning through case studies Shared clinical experiences	A 1 2 B 3 4 5 C 6 7 8 9 10 11 12 13 D14
2.To Understand the different views in XR and MRI and which tissues can be viewed anatomically	Interactive Lectures Quiz format Post course study	B5

	Clinical reasoning through case studies Shared experiences	
3.To recognise Normal Anatomy and Normal variants on XR and MRI To be able to recognise pelvic positions normal and abnormal variants	Interactive Lectures with line drawing on imaging practical component / quiz / polls independent study / pre course reading	B5
4.To recognise abnormal findings on x-ray and MRI and interpret these in the context of the clinical presentation	Interactive Lectures independent study Clinical reasoning through case studies	A2 B 3 4 5

5.To understand the indications, advantages and limitations in the use of imaging in diagnosis and management of common MSK problems To understand differential diagnosis of hip pathology	Interactive Lectures independent study Clinical reasoning through case studies/break out groups Evidence pre and post reading	B3 4 5
6 To understand the appropriate timing and selection of investigations and be able to reason and justify with patients and colleagues and the role of patient choice and pressures to image or not image request	Interactive Lectures independent study Clinical reasoning through case studies /break out rooms Shared experience	A1 2 B3 4 5 C13
7. Be able to convey the differential diagnosis and implications for management to enable informed choice about imaging and shared decision making with the patient.	Interactive Lectures independent study Clinical reasoning through case studies/break out rooms Shared delegate experience	A1 2 B5
8. To understand the relationship between pathology, clinical	Interactive Lectures independent study	A1 2

presentation and radiological findings in MSK conditions; within the current evidence available	Clinical reasoning through case studies/break out groups Shared delegate experience	B3 4 5 D14
9 To understand how the imaging process and findings inform the patient management pathway including rehab, injection therapy, surgical intervention and patient self-activation.	Interactive Lectures independent study Clinical reasoning through case studies Shared delegate experience	B3 4 5 C6 7 9 11 12 13
10.To understand when a patient needs to be referred to other colleagues in response to their imaging findings or clinical presentation.	Interactive Lectures independent study Clinical reasoning through case studies Shared delegate experience for local relevance	A1 2 B3 4 5 C8 9 10 11 12 13 D 14
11. To be aware of how to consolidate knowledge and develop the above skills in the clinical context to develop competency as a requester	e.g Discussion, MDTs, online resources, peer review, independent study expected (3 hours) and building of own portfolio	B3 4 5 C6 7 9 11, 12 13c

Reference for FCP Capability;

A 1 Communication. A2 Person-centred care

B 3History taking B4 Physical Assessment B5 Ix and diagnosis

C6 prevention and lifestyle Interventions C7 Self-management and behaviour change

C8 pharmacotherapy C9 Injection therapy C10 surgical interventions

C11 rehab interventions and care planning

C12 Interventions and care planning

C13 referrals and collaborative working

D14 EBP and service development

Appendix Hip

1/Bone tumour and metastatic disease cases and learning

2/Labral pathology in young hip and middle aged and adult population

3/ Osteoarthritis and the role of imaging (or not) in person centred care and including repeat imaging, when indicated and when not required/contraindicated

4/Normal bone loading and abnormal bone conditions such as Paget's/AVN

5/Complex hip/pelvic presentations trauma and low grade progressive conditions presenting to primary care / or MSK triage plus

6/Soft tissue lateral hip pain presentation.

7/Internal and external imaging pressures (case studies raised clinical suspicion/recent pathology indicated/patient reassurance scan and use? Patient centred approach for use of imaging?)