

Msk?...Think SpA! Recognition and referral of Axial and Peripheral Spondyloarthritis

Targeted health professional education: for First Contact musculoskeletal Practitioners or aspiring ones, assessing and managing people presenting with back pain and peripheral joint and tendon problem.

Target participants: Healthcare Practitioners in primary care: Musculoskeletal Physiotherapists, Osteopaths, General Practitioners

Education workshop:

Aim- To raise awareness, developing knowledge and clinical skills in musculoskeletal clinicians on how to recognise and when to refer to Rheumatology for suspected axial spondyloarthritis (Axial SpA)

Outcome:

Improve delays to diagnosis of Axial Spondyloarthritis and peripheral spondyloarthritis by improving recognition and referral of suspected axial and peripheral spondyloarthritis by primary care clinicians to support earlier diagnosis, intervention and improved outcomes.

Background:

Spondyloarthritis is a group of inflammatory conditions that mimic common musculoskeletal problems. Delays in diagnosis average up to 8-9 years for many people, despite significant advances in research and imaging¹, because it is often not recognised in musculoskeletal assessments^{2,3}. Screening for suspected spondyloarthritis (SpA) and when to refer onto rheumatology is an essential a core skill in clinical assessments^{4,5}.

Musculoskeletal clinicians are key in early diagnosis to help reduce the significant immediate and long-term impacts of these inflammatory diseases. Spondyloarthritis can be challenging to recognise and often mistaken as chronic mechanical low back pain or unrelated tendon and joint problems^{4,5}. Research shows that the inflammatory disease links between persistent back pain, peripheral problems and extra-articular inflammatory manifestations are often missed in clinical practice². Knowing what features should raise suspicion of spondyloarthritis and when to refer onto rheumatology is an important aspect of musculoskeletal clinical practice, along with a multidisciplinary team approach to management. Research also indicates that musculoskeletal clinicians report a lack of confidence and awareness in screening for axial spondyloarthritis^{3, 6}, added to by findings of a paucity of literature on axial SpA and PsA occurring in the musculoskeletal professional⁷.

NICE have developed clinical guidance to support earlier recognition, diagnosis, treatment and other important considerations in people diagnosed with SpA. This is supported by increasing research, national campaigns and the development of increasing resources to support earlier diagnosis^{8,9}. This education day aims to enable clinicians to develop their clinical knowledge and skills to screen for suspected spondyloarthritis

within musculoskeletal assessments when to refer for Rheumatology assessment, and to raise awareness of the research and resources available to support their clinical practice in screening for these conditions.

References

1. Gregory WJ, Kaur J, Bamford S, Tahir H. A Survey of Diagnostic Delay in Axial Spondyloarthritis Across Two National Health Service (NHS) Rheumatology Services. *Cureus*. 2022 Mar 30;14(3):e23670. doi: 10.7759/cureus.23670. PMID: 35510018; PMCID: PMC9060761.
2. McCrum, C., Kenyon, K., Cleaton, J. and Dudley, T., (2019). An Unrecognised Masquerader: a retrospective review of people presenting to musculoskeletal physiotherapy with undiagnosed spondyloarthritis. *Physiotherapy*, 105, e102-e103.
3. Steen, E. Cairns, M., McCrum, C (2021). Physiotherapist' awareness, knowledge and confidence in screening and referral of suspected Spondyloarthritis: A survey of UK clinical practice. *Musculoskeletal Care*, Feb <https://doi.org/10.1002/msc.1537>
4. McCrum C (2019) Appraisal of Clinical Practice Guideline: NICE Guidance on Spondyloarthritis in over 16s: diagnosis and management [NG65], *Journal of Physiotherapy*, 65, 4, 242. doi.org/10.1016/j.jphys.2019.07.001
5. McCrum (2019) Guest Editorial -When to suspect spondyloarthritis: A core skill in musculoskeletal clinical practice. *Musculoskeletal Science and Practice*, 41, iii. <https://doi.org/10.1016/j.msksp.2019.102079>
6. Yong CY, Hamilton J, Benepal J, Griffiths K, Clark ZE, Rush A, Sengupta R, Martindale J, Gaffney K. Awareness of axial spondyloarthritis among chiropractors and osteopaths: findings from a UK Web-based survey. *Rheumatol Adv Pract*. 2019 Sep 30;3(2):rkz034. doi: 10.1093/rap/rkz034. PMID: 31616854; PMCID: PMC6785804.
7. McCrum, C. 2020. Delaying Diagnosis: inflammatory back pain and other features of suspected spondyloarthritis have been rarely featured in musculoskeletal health professions literature, *British Society of Rheumatology*, 22 April. Supp_2
8. MacMillan, A, Corser, A, Clark, Z, McCrum, C, Gaffney, K (2021) Masterclass: Axial spondyloarthritis for osteopaths and manual therapists. *International Journal of Osteopathic Medicine*, 41. pp. 45-56. ISSN 1746-0689
9. [Rheumatology Physiotherapy Capabilities Framework vFINAL Interactive.pdf \(macpweb.org\)](#)

Learning outcomes

- Develop an awareness of the clinical presentations of axial spondyloarthritis and peripheral spondyloarthropathies.
- Gain an understanding of the importance of screening for spondyloarthritis in musculoskeletal clinical assessments.
- Develop knowledge of the clinical signs, symptoms and risk factors which increase suspicion of axial and peripheral spondyloarthritis.
- Gain knowledge and skills in screening for axial and peripheral spondyloarthritis in a clinical examination.
- Develop an understanding of the recommendations of NICE Guidance on Spondyloarthritis.

- Gain practical skills in history taking and clinical examination for suspected spondyloarthritis and associated extra-articular manifestations, including skin and nail examination for psoriasis.
- Be aware of features and develop advanced clinical reasoning skills in the differentiation of mechanical and suspected inflammatory clinical presentations.
- Develop an awareness of treatment options for spondyloarthritis and supporting long-term management.
- Develop an understanding of the role of blood tests and imaging in suspected axial and peripheral spondyloarthritis including when to refer to Rheumatology with discussion on how to undertake referrals.

Speaker:

The Education workshops will be delivered by Dr Carol McCrum (BSciApp, GD (Manip), Dip Inj, Dip Msk.Med, DPT, UK Non-medical Prescriber). Carol is a Consultant Physiotherapist, Specialist Rheumatology Physiotherapist and NICE Fellow who has delivered this workshop in the UK to physiotherapists, osteopaths and GPs since 2018. Her course supports earlier diagnosis and reduce the impacts for people with axial and peripheral spondyloarthritis.

Biography

Dr Carol McCrum has been a Consultant Physiotherapist in Rheumatology and Orthopaedics since 2005 and currently works at Canberra Hospital, Rheumatology Department, ACT. Carol completed her doctorate in acute low back pain (2011) and is a Visiting Research Fellow at University of Brighton. She remains active in research, publication and knowledge translation, supporting researcher development in clinical and academic contexts.

Carol was a committee member of NICE Guidance (2017) and Quality Standards (2018) on Spondyloarthritis and was awarded a NICE Fellowship to raise awareness of this guidance. She is involved in national and international projects to improve pathways, develop guidance and promote high quality care in rheumatology. Carol is Co-Chair of the recently formed Rheumatology Specialist Physiotherapy Clinical Interest Group. She is also co-author of the UK Rheumatology Physiotherapy Capabilities Framework development project. The Capabilities Framework aims to support the physiotherapy workforce, role development, professional education, and support those working in musculoskeletal clinical practice to ensure early recognition and referral of suspected rheumatological conditions.

Proposed timetable

09:00 - 09:15 –Welcome and Introduction

09:15 -09:45 - Msk?...Think SpA! Overview of Axial Spondyloarthritis (AxSpA) and clinical manifestations

09:45 - 10:30 When to suspect axial and peripheral spondyloarthritis -NICE clinical guidance on referral to rheumatology

10:30 – 10:45 Break

10:45- 11.15 - Imaging considerations in suspected axSpA and Psoriatic Arthritis/Peripheral SpA

11:15 - 11:30 Other considerations in people with spondyloarthritis

11:30 - 12:00 Extra-articular manifestations- considerations for clinical assessments

12:00 - 12:30 Lunch

12:30 - 13:00 Screening - History taking, case studies and clinical reasoning workshop- practical workshop

13:00 - 14:00 Extra-articular manifestations – considerations, clinical assessments and skin examination

14:00 - 14:15 Referral letters and pathways- discussion and Q&A

14:15- 14:30 Summary, final questions and feedback questionnaires

Course suitability

This course is suitable for clinicians involved in the assessment and management of musculoskeletal conditions in daily practice, particularly those managing persistent back pain and peripheral joint and tendon problems. It is also suitable for University and clinical educators involved in pre and post graduate professional education of musculoskeletal assessment and management.

Number of participants- 20 per venue /online

Learning outcomes	Delivery Methods	Msk CCF ^	IFOMPT Dimension#	FCP Roadmap Essential Knowledge: <i>Specific knowledge underpinning capabilities 1 & 2</i> Domain A Personalised approaches
<ul style="list-style-type: none"> Develop an awareness of the clinical presentations of axial spondyloarthritis and peripheral spondyloarthropathies. 	<ul style="list-style-type: none"> Interactive lectures Clinical reasoning through vignette, case discussions and knowledge quizzes Pre-course reading and resource materials Peer learning through questions, group activities and discussion 	B3, B4, B5	D1-K1, S1,2,3 A1 D2 – K11, K12, S1, A1 D4 K3 D6 S3	<p>Domain B. Assessment, Investigation and Diagnosis</p> <p>Capability 3. History-taking</p> <p>a) Listen to individuals, ask questions and obtain appropriate additional information, with due sensitivity and consideration of what information needs to be sought to optimise the effectiveness and efficiency of the subjective examination.</p> <p>b) Gather and synthesise information on the nature of the individual’s symptoms taking account of how these issues relate to the presenting and past history, their activities, any injuries, falls, frailty, multimorbidity or other determinants of health and the characteristics of MSK conditions.</p> <p>c) Assess the impact of individuals’ presenting symptoms, including the impairment of function, limitation of</p>

				<p>activities and restriction on participation, including work.</p> <p>d) Gather and synthesise information on the nature of individuals' issues from various appropriate sources e.g. previous histories and investigations, considering how symptoms relating to the MSK system may manifest as pain, stiffness, weakness, fatigue, limitation of activities and restriction of participation.</p> <p>g) Critically appraise information obtained, taking account of the potential for MSK symptoms to be features of non-MSK conditions, indicative of serious pathology, compounded by psychological and mental health factors, and affected by lifestyle factors (including smoking, alcohol and drug misuse).</p> <p>h) Critically appraise complex, incomplete, ambiguous and conflicting information presented by individuals, distilling and synthesising key factors from the appraisal, and identifying those elements that may need to be pursued further</p>
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			<p>Related Knowledge area:</p> <ul style="list-style-type: none"> ● Normal structure and function of the MSK system and processes that can affect this <p>-pathological processes relating to MSK conditions, including the ageing process, injury and disease states and repair of MSK tissues (including bone, cartilage, synovium, muscle and enthesis).</p> <p>-features of an MSK problem that are relevant to making a diagnosis, including symptoms which help distinguish inflammatory from non-inflammatory condition</p> <p>-syndromes that MSK problems present as, their differential diagnoses and the characteristics of the different MSK conditions including systemic features and their expected progression / prognosis to support making a diagnosis and management plan.</p> <p>Capability 4. Physical assessment</p> <p>c) Undertake observational and functional assessments of individuals relevant to their</p>
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				<p>presenting condition to identify and characterise any abnormality.</p> <p>d) Select and conduct an appropriate initial MSK screening assessment.</p> <p>e) Apply a range of physical assessment techniques appropriately, systematically and effectively, informed by an understanding of techniques' respective validity, reliability, specificity and sensitivity and the implications of these limitations within an assessment.</p> <p>f) Identify, analyse and interpret potentially significant information from the physical assessment (including any ambiguities</p>
<ul style="list-style-type: none"> Gain an understanding of the importance of screening for spondyloarthritis in musculoskeletal clinical assessments. 	<ul style="list-style-type: none"> Interactive Lectures Pre-course reading and resource materials Reflective learning with pre- & post knowledge evaluation 	A2, B3, B4, B5	D1-K1, S3, A1 D2-K12, S1, A1, A2 D5-K8, K9	<p><i>Domain B: Assessment, Investigation and Diagnosis</i></p> <p>Capability 5. Investigations and diagnosis</p> <p>-</p> <p>Demonstrate comprehensive advanced knowledge of the theoretical basis the assessment of the MSK system and interpretation of this assessment towards a clinical diagnosis</p>

				<p>Knowledge area:</p> <ul style="list-style-type: none"> -Syndromes that MSK problems present as, their differential diagnoses and the characteristics of the different MSK conditions including systemic features and their expected progression / prognosis to support making a diagnosis and management plan. -Commonly seen patterns and syndromes may include: joint pain — mono, poly, peri-articular; regional pain or stiffness; generalised pain or stiffness; regional pain or stiffness, including foot and ankle pain; neck pain; back pain; bone pain; muscle pain, stiffness or weakness; systematic problems — extra-skeletal problems -biological and psycho-social sciences applicable to MSK problems - how an MSK problem can impact on an individual and society including: -Cause of which can be related to: Infectious, degenerative, immune mediated, inherited
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				<ul style="list-style-type: none"> - Appropriate investigative tests to aid diagnosis and assessment. • Understand the indications and limitations of different tests to inform decision-making and interpret test results. How to support the development of a management plan: <ul style="list-style-type: none"> - Conditions where an early referral and diagnosis may be particularly important for optimising individuals' long term outcomes; e.g. inflammatory arthritis and inflammatory joint and spine diseases, joint infection, soft tissue infection, bone infection, temporal arteritis. - Pharmacological therapies for symptom or disease control: <ul style="list-style-type: none"> -Understand role of common medications, the expected benefits and limitations: – Medications used to treat pain, including: analgesics, non-steroidal anti-inflammatory drugs, corticosteroids, anti-rheumatic drugs- Biological
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				<p>agents used for inflammatory arthritis,</p> <ul style="list-style-type: none"> - Local injection in peripheral spondyloarthritis: Understand role of common injections, the expected benefits and limitations
<ul style="list-style-type: none"> ● Develop knowledge of the clinical signs, symptoms and risk factors which increase suspicion of axial and peripheral spondyloarthritis. 	<ul style="list-style-type: none"> ● Clinical reasoning through vignette cases ● Group knowledge quizzes and discussions ● Pre-course reading and resource materials ● Peer learning through questions, group activities and discussion 	B3, B4, B5	<p>D1-K1, S1, S2, S3 D2-K1, K2, K5, K12, S1, A2 D3-K3, K4, S2, A1 D5- K2, K8, K9, S1, S2, S8, A2 D6-K2, K3, K4, S1, S2, S7, A1 D8, D9-S1, A2</p>	<p>Domain A1-</p> <ul style="list-style-type: none"> -Demonstrate advanced use of clinical reasoning to integrate scientific evidence, clinical information, the individual's circumstances -Demonstrate comprehensive advanced knowledge of the relevant clinical sciences as applied to MSK conditions, such as clinical anatomy, physiology, pain science, biomechanics and epidemiology in assessment and management
<ul style="list-style-type: none"> ● Gain knowledge and skills in screening for axial and peripheral spondyloarthritis in a clinical examination. 	<ul style="list-style-type: none"> ● Clinical reasoning through vignette cases and knowledge quizzes 	A1, B3, B4, B5	<p>D1-K1, S1,2,3 A1 D2- K1, K2,K5, K7, K8, K9 D3-K1, K3, K4, S2, A1</p>	<p>Capability</p> <ul style="list-style-type: none"> ● Capability 3. History taking Demonstrate efficient and effective use of advanced active listening skills throughout the individual's encounter

	<ul style="list-style-type: none"> ● Pre-course reading and resource materials ● Peer learning through questions, group activities and discussion 		<p>D5- K8, K9 D10-K2, K3, K5, S5</p>	<p>eg both are involved in an active two way process</p> <ul style="list-style-type: none"> ● Capability 4. Assessment <ul style="list-style-type: none"> a) Assess the importance and meaning of presenting features from the clinical assessment, recognising the different patterns, syndromes and conditions commonly seen in first point of contact roles. b) Identify potential serious pathology and make appropriate onwards referral. c) Identify risk factors for severity or impact and use tools where they exist to analyse and stratify risk of progression to long term pain and disability. d) Diagnose common problems that can usually be managed at first point of contact. e) Recognise and act where an early referral and diagnosis may be particularly important for optimising individuals' long term outcomes h) Instigate appropriate investigative tests to aid diagnosis and assessment. i) Understand and interpret test results and act appropriately, demonstrating an
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				<p>understanding of the indications and limitations of different tests to inform decision-making and the imperative of using scarce, expensive or potentially harmful investigations judiciously.</p> <p>Domain C. Condition Management, Interventions and Prevention Capability 6. Prevention and lifestyle interventions</p> <p>i) Use interactions to encourage changes in behaviour that can have a positive impact on the health and wellbeing of individuals, communities and populations.</p>
<ul style="list-style-type: none"> Develop an understanding of the recommendations of NICE Guidance on Spondyloarthritis, on when to refer to rheumatology and discussion on how to undertake referrals. 	<ul style="list-style-type: none"> Clinical reasoning through vignette cases Group knowledge quizzes and discussions Pre-course reading and resource materials Peer learning through questions, group 	B3, B4, B5	D2- S1, S3, A1, A2, A3 D3 D4-K4, D7- K3, K4 D8-K4 D10-S3,	<p>Capability 12. Interventions and care planning:</p> <p>c) Advise on and instigate a management plan for common MSK conditions and their symptoms — instigating this may be through referral to others with specific relevant capabilities.</p>

	activities and discussion			
<ul style="list-style-type: none"> Develop an understanding of the role of blood tests and imaging in suspected axial and peripheral spondyloarthritis. 	<ul style="list-style-type: none"> Interactive lectures Clinical reasoning through vignette cases Group knowledge quizzes and discussions Pre-course reading and resource materials Peer learning through questions, group activities and discussion 	B3, B4, B5	D1-K1, S1, S3 D4- K3 D5-K8, K9	<ul style="list-style-type: none"> Demonstrate comprehensive advanced knowledge of appropriate medical diagnostic tests and their integration required to make a Msk clinical diagnosis eg, able to select the appropriate investigative tests, interpret results, and inform assessment and decision-making Demonstrate comprehensive advanced knowledge of the specific indications and contraindications (including behavioural principles) of the use of diagnostic tools including imaging, blood test, neurophysiology etc.
<ul style="list-style-type: none"> Gain practical skills in history taking and clinical examination for suspected spondyloarthritis and associated extra-articular manifestations, including skin and nail 	<ul style="list-style-type: none"> Clinical reasoning through vignette cases Group practical activities knowledge quizzes and discussions Pre-course reading and resource materials 	B3, B4, B5, C6, C7, C12, C13	D1-K1, S1,2,3 A1 D2- K1,K2,K5, K11, K12, K13, S1, S2, S3 D3 S1 D4 S1 D5-K2, S1, S2, S9, A2	A1 Demonstrate advanced use of interpersonal and communication skills during the history taking, physical examination, reassessment, and management of individuals, including all documentation e.g. consideration of verbal and non-verbal communication, adapting to individual preferences, cognitive and sensory impairment, and

<p>examination for psoriasis.</p>	<ul style="list-style-type: none"> Peer learning through questions, practice and discussion 		<p>D6—K2, K3,K4, K5 D7.S2</p> <p>D8-K1, K3, K4, S2, A1, A2 D10 K1, A5</p>	<p>language needs. Avoids jargon and negative assumptions.</p> <p>Demonstrate advanced application of comprehensive knowledge of the examination and management of individuals with MSK conditions e.g. able to assess and manage commonly seen patterns and syndromes and the causes to which they relate: joint, bone pain, muscle pain and weakness, systemic extra-skeletal problems related to trauma, degenerative, neoplastic, developmental/ congenital, and psychological causes etc.</p> <p>Demonstrate efficient and effective use of advanced active listening skills throughout the individual's encounter</p> <p>c) Undertake observational and functional assessments of individuals relevant to their presenting condition to identify and characterise any abnormality.</p> <p>d) Select and conduct an appropriate initial MSK screening assessment.</p> <p>e) Apply a range of physical assessment techniques appropriately, systematically and effectively, informed by an understanding of techniques' respective validity, reliability, specificity and sensitivity</p>
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				and the implications of these limitations within an assessment. f) Identify, analyse and interpret potentially significant information from the physical assessment (including any ambiguities
<ul style="list-style-type: none"> Be aware of features and develop advanced clinical reasoning skills in the differentiation of mechanical and suspected inflammatory clinical presentations, and how and when to refer for specialist assessment. 	<ul style="list-style-type: none"> Interactive lectures Clinical reasoning through vignette cases Group knowledge quizzes and discussions Peer learning through questions, group activities and discussion 	B3, B4, B5	D1-K1, K2, K5, S1,2,3 A1 D2- K1,K2,K5, K7, K8, K9 D3: K1, K3, K4, S2 D5-K2, K8, K9 D6-A1, A3, A4, A5	<p>i) Communicate effectively with colleagues using a variety of media (e.g. verbal, written and digital) to serve individuals' best interests.</p> <p>j) Respect and draw on colleagues' knowledge and expertise within the multi-disciplinary team to serve individuals' best interests.</p>
<ul style="list-style-type: none"> Develop an awareness of other considerations with Spondyloarthritis 	<ul style="list-style-type: none"> Interactive lectures Pre-course reading and resource materials 	B3, B4, B5, C6, C7, C12, C13	D3 -K4 D5-K9 D8 K2	<p>Domain C: Condition management, interventions and prevention</p> <p>-Demonstrate efficient and effective management of patients with multiple complex inter-related or separate problems and/or co-morbidities</p> <p>Capability 8. Pharmacotherapy:</p>

				<p>a) Understand the role of common medications used in managing MSK conditions, including analgesics, non-steroidal anti-inflammatory drugs, corticosteroids, drugs used in treating individuals with metabolic bone diseases, gout, inflammatory arthritis,</p> <p>f) Refer for advice about pharmacotherapy, when considered appropriate</p> <p>Capability 10. Surgical interventions</p> <p>b) Advise on the expected benefits and limitations of most common surgical interventions used in managing specific MSK conditions where these are relevant to individuals' care and inform them impartially on the advantages and disadvantages in the context of other management options.</p> <p>Knowledge:</p> <p>Understand role of spinal surgical intervention in axial spondyloarthritis</p>
<ul style="list-style-type: none"> Develop an awareness of professional support resources for recognition 	<ul style="list-style-type: none"> Interactive lectures and discussions 	<p>A1 , A2</p> <p>B3, B4, B5,</p>	<p>D2 K5</p> <p>D6- A2,</p>	<p>Capability 1- Communication:</p> <p>g) Respond to individuals' communication and information needs and support the use</p>

<p>and referral of axial spondyloarthritis</p>	<ul style="list-style-type: none"> ● Course reading, handouts and resource materials 		<p>D7 K3, K4</p>	<p>of accessible information as needed, accessing interpreters as required.</p> <p>h) Signpost individuals appropriately and effectively to sources of information and support.</p> <p>Capability 7. Self-management and behaviour change:</p> <p>j) Advise on sources of relevant local or national self-help guidance, information and support</p>
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