



Exercises for Axial Spondyloarthritis (AxSpA)

Information for patients

This leaflet has been designed to guide you through some movement and stretching exercises to maintain the movement that you have in your spine, and to help prevent the stiffness that is associated with spondyloarthritis.

The recommendations for holding time and repetitions are guidelines only. Please adapt these depending on your pain and stiffness levels, and progress as you feel able. You can ask the physiotherapist for guidance on this during your exercise sessions.

If at any point during the exercises you feel faint, too short of breath or light headed, please take a break from the exercises until you feel well enough to continue.

Although this booklet concentrates on flexibility and stretching exercises, it is also important that you do some regular cardiovascular exercise for your general health and fitness, and some resistance exercise to strengthen your muscles which is important for maintaining good posture and health. You should always do a gentle five minute warm up before starting to prepare your body for exercise.

Posture

It is important to practice good posture and spinal position on a daily basis.

Ensure that you sit or stand up straight, relax your shoulders and gently widen your collar bones. Tuck your chin gently back and down slightly.



For more exercise ideas and information on spondyloarthritis, please go online to the NASS website: www.nass.co.uk.

Cervical spine range of movement exercises

Cervical rotation



Start position



Movement



Progression

- Turn your head to look over your right shoulder as far as you can.
- Hold 15 seconds. Repeat 3 times both sides.

Progression

- Using your right hand place two fingers on your jaw line.
- Try to turn your head to the left whilst resisting gently with your fingers.
- Hold for 5 seconds, relax, then try to turn head further
- Hold for 15 seconds. Repeat 3 times each side.

Cervical retraction



Start position



Movement

- Gently tuck your chin backwards and down. Feel a stretch at the back of your neck.
- Hold for 15 seconds. Repeat 3 times.

Side flexion



Start position



Movement



Progression

- Tilt your head bringing your left ear towards your left shoulder.
- Hold 15 seconds. Repeat 3 times both sides.

Progression

- Using your left hand place two fingers on your head and try to tilt your head towards the right whilst resisting gently with your hand.
- Hold for 5 seconds, relax and try to tilt your head further.
- Hold for 15 seconds. Repeat 3 times each side.

Flexion



Start position



Movement



Progression

- Move your head to look down. Avoid poking your head and neck forwards.
- Hold 15 seconds. Repeat 3 times.

Progression

- Place your hand on the back of your head and gently assist your head down further.
- Hold for 15 seconds. Repeat 3 times.

Combined cervical flexion, rotation and side flexion



Start position



Movement



Progression

- Turn your head to look over your right shoulder, then look down with your head, then bring your right ear towards your right shoulder.
- Hold 15 seconds. Repeat 3 times each side.

Progression

- Place your hand at the back of your head on the left side, and gently assist your head down further.
- Hold 15 seconds. Repeat 3 times.

Thoracic spine range of movement exercises

Please note: Spine neutral=not slumped or arched

Thoracic rotation



Start position



Movement



Progression

- Spine in neutral, place your hands across your chest.
- Turn your body to the left, trying to keep your hips facing forwards.
- Repeat 5-10 times each side.

Progression

- With hands on the side of the chair, pull gently to assist your upper body further round.
- Hold for 10-15 seconds. Repeat 3-5 times on each side.

Trunk extension



Start position



Movement

- Spine in neutral.
- Gently lean backwards over the back of the chair, arching your back.
- Repeat 5-10 times.

Chest expansion - 'The Low V'

Please note: Do these next two exercises without the deep breath in if you start to feel lightheaded at any point.



Start position



Movement

- Spine in neutral and arms down by side, palms facing forwards.
- Take a deep breath in as you bring your arms and shoulders backwards.
- Hold your breath at the top for 2-3 seconds.
- Breathe out and return to starting position. Repeat 3 times.

Chest expansion - 'The Ballerina'



Movement

- Sitting or standing, link fingers together.
- Take a deep breath in as you raise arms up and overhead, with palms up to the ceiling.
- Hold for 2-3 seconds.
- Breathe out and return to the start position.
- Repeat 3 times.

Arm opening



Start position



Movement



Progression

- Lying on side, knees bent and stacked on top of each other, take arms out in front of you, hands in prayer position.
- Lift top arm up towards ceiling, allowing the top half of body to rotate. Follow the movement, but keep hips facing forwards.
- Hold 5-10 seconds. Repeat 2-3 times each side.

Progression

- Allow top arm to reach opposite side of the mat, and hips to turn with body.
- Look the opposite way to where your knees are pointing.
- Hold 5-10 seconds. Repeat 3-5 times each side.

Lumbar spine range of movement exercises

Knee rolls



Start position



Movement



Progression

- Lying on your back, knees bent and feet on the floor.
- Roll both knees to one side until you can feel a stretch in your lower back.
- Hold for 3-5 seconds then return to start.
- Repeat 5 times each side.

Progression

- Stretch your arm out to the opposite side to that of your knees, and turn your head to face your arm.
- Hold 3 seconds. Repeat 5 times each side.

Pelvic tilts



Start position



Movement

- Squash your lower back into the bed, tilting bottom upwards towards the ceiling.
- Hold for 3-5 seconds. Relax.
- Repeat 5-10 times.

Progression 1- to bridge

- Perform the same movement, but lift bottom higher up off the floor.
- Hold for 3-5 seconds. Relax.
- Repeat 5-10 times.



Progression 1

Progression 2- to shoulder bridge

- Perform the same movement, but lift your hips higher towards the ceiling, so your body is just resting on your shoulders and feet.
- Hold for 3-5 seconds. Relax.
- Repeat 5-10 times.



Progression 2

Rotation using hand to knee



Movement



Progression

- Lying on your back with left hip and knee bent to 90°.
- Place opposite hand on left knee, gently pull your knee across your body as far as you comfortably can.
- Hold for 15-20 seconds.
- Relax and repeat 2-3 times each side.

Progression

- Take left knee down towards floor on opposite side, then stretch out left arm and head to look at arm for maximum stretch.
- Hold 20-30 seconds. 2-3 times each side.

Knee hugs

A: Single leg B: Double leg



Start position



A-Single leg

A-Single leg

- Lying on back, bend right knee up towards chest, and hug it in towards your chest.
- Hold for 15 seconds.
- Repeat 2-3 times each leg.

A-Single leg progression

- For more of a stretch, keep left leg straight.
- Hold for 15 seconds.
- Repeat 2-3 times each leg.



A-Progression

B-Double leg

- Bend both knees up towards chest, and hug them.
- Hold for 15 seconds.
- Repeat 2-3 times.



B-Double leg

B-Double leg progression

- Perform double leg movement, but tuck head in towards knees.
- Hold 20-30 seconds.
- Repeat 2-3 times.



B-Progression

Standing side flexion



Start position



Movement



Progression

- *Standing with back and heels against wall.*
- *Slide hand down side of leg towards knee as far as you can.*
- *Hold for 3-5 seconds. Repeat 5-10 times each side.*

Please note: *Ensure that your back does not come away from the wall as you slide your hand down your leg.*

Progression

- Take the opposite hand over your head and hold for 10-15 seconds.
- Repeat 3-5 times each side.

Lumbar extension



Start position



Movement

- Lying on your tummy. Head relaxed looking down, hands either side of your head. Slowly lift chest off the floor until you are on your forearms.
- Hold 15-20 seconds. Relax.
- Repeat 3-5 times.

1) Progression to hands

- Straighten elbows so that you are on your hands.
- Hold 15-20 seconds.
- Repeat 3-5 times.



1-Progression

2) Progression to dorsal raise

- With arms by side, lift your arms and chest off the floor.
- Hold 2-3 seconds. Repeat 5-10 times



2-Progression

Whole spine stretches

Cat and cow stretch



Start position



Cat



Cow

A-Cat

- Kneeling on all fours with spine flat, hands under shoulders, knees under hips.
- Head relaxed looking down.
- Arch spine upwards into a hump, tucking bottom under.
- Then perform the 'Cow'.

B-Cow

- Arch spine downwards and stick bottom out.
- Move between these 2 positions 5-10 times.

Prayer/'Childs' pose



Movement



Progression

- Sit backwards onto heels with arms stretched out in front of you.
- Hold 20-30 seconds. Repeat 2-3 times.

Progression

- Take knees apart and press chest towards floor, sliding arms further forward.
- Hold 20-30 seconds.
- Repeat 2-3 times.

Thread the needle



Part 1



Part 2

Part 1

- Kneeling on all fours, spine neutral.
- Reach your hand under your body and rotate your body towards your hand.

Part 2

- Then stretch your hand the opposite way upwards towards the ceiling, following the movement with your body.
- Repeat 5-10 times each direction.

Roll down



Start position



1



2



3

- Tilt head down then start to bend forwards by rolling each segment of your spine down until your hands are nearly reaching the floor.
- Hold 5-10 seconds. Repeat 2-3 times.
- Then slowly come back up segment by segment, bringing your head up last.

Progression

- Roll down until your hands are touching the floor.
- Hold 5-10 seconds. Repeat 2-3 times.

Lower limb stretch section

H/S

Lying instruction



Start position



Movement

- Lying on back. Bend hip and knee up towards chest.
- Then straighten left knee as much as able and use hands to pull leg closer to you.
- Hold 30 seconds. Repeat 2-3 times each side.

Sitting instruction



Start position



Movement

- Sitting perched on the end of a chair, stretch right leg out straight in front of you, toes pointing to ceiling.
- Slide one hand down leg bending at the waist until you feel stretch at the back of your leg. Keep knee straight throughout.
- Hold 30 seconds. Repeat 2-3 times each side.

Hip flexors

- Standing, holding on to a stable surface/wall.
- Take a large step forwards with your right leg into a lunge position, keeping your left leg still.
- Lean further onto your right leg keeping your left leg straight.
- Feel a stretch down the front of your left leg.
- Hold for 20-30 seconds.
- Repeat 2-3 times each side.



Movement



Progression

Progression

- Lunge forwards so your left knee touches the floor.
- Hold 20-30 seconds.
- Repeat 2-3 times each leg.

Piriformis



Movement



Progression

- Lying on back, place your left foot on your right knee, allowing your left knee to drop to the side. Feel a pull in your left buttock.
- Hold 20-30 seconds. Repeat 2-3 times each side.

Progression

- Perform the movement, then with your hands under your right thigh, bring your knees further towards your chest, whilst pushing your left knee down with your left elbow, to increase the stretch in the left buttock.
- Hold 30 seconds. Repeat 2-3 times each side.

Personalised flare management plan

Normal AxSpA medication regime:

Flare medication regime:

Complete Bath scores online to monitor symptoms (TalkingAS app):

Gentle exercises to try (eg rotation in sitting/knee rolls/neck rotation):

Positions of ease (eg lying on side with knees bent/sitting leaning forwards):

Gentle activities of daily activity to try (eg have a bath/make a meal):

Distractions to try (eg music/mindfulness/relaxation techniques):

Further contacts for advice

1. Your GP
2. RBH Rheumatology Advice Line: 0118 322 6574

Further information

NHS Choices physical activity guidelines for adults

www.nhs.uk/Livewell/fitness/Pages/physical-activity-guidelines-for-adults.aspx

Local contacts/exercise groups including Hydrotherapy and Tai Chi

National Ankylosing Spondylitis Society (NASS) (Reading Branch)

<https://nass.co.uk/branch/reading/>

Contact: Mrs Philippa Allan: 0118 978 0212

Reading Physio-led Pilates Group

E-mail: jessica_riddy@hotmail.com

Jessica Riddy: 07834 452 926

Reading Arthritis Matters

www.arthritismattersreading.co.uk

Contact: Kim Seabrook: 0118 977 6172

Please note: Other Pilates groups are available e.g. local gyms / community centres / private physio practices

Useful websites

www.nass.co.uk: includes YouTube videos of exercises and management of AxSpA)

www.asone.nass.co.uk: portal for young people living with AxSpA

www.talkingas.com: Talking AS is an online tool designed to help monitor and manage your AS online, including completing Bath scores – available as an app

www.thisaslife.com: website dedicated to discussion of living with AxSpA day to day

www.spondylitis.ca: includes a video demonstrating key exercises

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This document can be made available in other languages
and formats upon request.

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