

Virtual arthritis physical assessment



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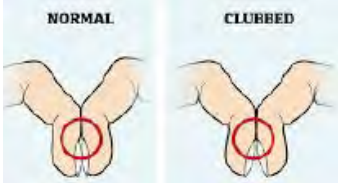




TARGET OF ASSESSMENT





THERAPIST INSTRUCTIONS

HINTS/TIPS AND TRICKS

VITAL SIGNS, BODY SIZE, SKIN, HAIR AND NAILS

<p>Weight</p> 	<p>Ask patient to take their weight using their home scale, if they have one, and report weight back.</p> <ul style="list-style-type: none"> ▼ If no scale, is there a difference in how clothing fits over the last month (clothing size change, belt needs to be tighter, pants are looser or longer now). ▼ If patient is well known to the therapist weight loss or weight gain can be noticeable on camera. 	<p>If possible, request this be done ahead of the visit.</p>
<p>Height</p> 	<p>Ask patient to stand in front of a mirror- ask them to use a piece of tape (or post it note) to mark their height, then use a tape measure to measure the height.</p>	<p>If possible, request this be done ahead of the visit.</p>
<p>Blood pressure and heart rate</p> 	<p>Ask patient to take their blood pressure and heart rate on their home machine.</p> <ul style="list-style-type: none"> ▼ If no blood pressure machine is available, show them how to find their wrist pulse, then count the number of beats while you keep track of the timer. 	<p>If possible, request this be done ahead of the visit.</p>
<p>Temperature</p> 	<p>Ask the patient to take their temperature.</p>	<p>If fevers are reported, ask them to document them ahead of visit.</p>
<p>Skin/Rash</p> 	<p>Ask the patient to show you rash on camera by exposing areas of skin with lesions. If video quality is poor, ask the patient to take pictures of the rash with their cell phone and email. Document:</p> <ol style="list-style-type: none"> 1. Ask patient to quantify how much rash is present by comparing the palm of their hand to the rash (i.e. Rash size = 6 hand palms). Alternatively, if skin lesions are small, ask patient to measure them, and estimate total number. 	<ol style="list-style-type: none"> 1. Ask patient to take pictures with both flash and no flash on their phone.

	<p>2. Note the colour of the skin, and any visible changes on the patient's face, arms, and chest (visible skin areas).</p> <p>3. Note if makeup is worn; ask patient if you're not sure.</p> <p>Ask the patient to pinch their skin if hypermobility or scleroderma is suspected- note how much skin can be pulled on the fingertips, dorsum of hand, forearms and upper arms.</p>	<p>2. If rash is hard to visualize, ask patient to place limb over a blue surface (towel, sweater, or pillowcase), and if no blue is available then white colour is next best.</p>
<p>Nail changes</p> 	<p>Ask patient to examine their fingernails and look for:</p> <ul style="list-style-type: none"> a) Pits (ask them to look for divots or pinpoint size indentations) b) Ridges through the nail-ask them which way they go (up and down the nail= longitudinal, sideways across) c) Brown spots or coloured lines d) Tiny red dots on the skin surrounding the nails e) Swelling of skin around the fingernails f) Lifted, brittle, bumpy nails g) Note clubbed nails (see Schamroth window test) <p>4. Note if nail polish is worn or if fingernails are chewed</p>	<p>If possible, visualize, or ask patient to take a picture.</p> <p>Show patient examples of what you want them to search for (pitting for instance) using content sharing or printed photos.</p> 
<p>Hair</p> 	<p>Ask the patient if they have experienced any hair loss.</p> <ul style="list-style-type: none"> 1. Ask patient to remove barrettes, hair elastics etc., and to gently grasp a handful of hair with each hand behind ears and slide hands down hair, and show you how many hairs were lost (tug test). 2. Ask patient to show you any bald spots by tilting their head or camera. 3. Ask patient about hair loss in the shower, or in bed on pillowcase (average # of hairs lost). 	
JOINT ASSESSMENT		
<p>GALS and Range of motion</p> 	<p>If time is limited: Guide the patient through the GALS to get an idea of their range of motion. Document:</p> <ul style="list-style-type: none"> 1. Differences between right and left joints, and different digits. 2. Any problem areas that you want to look into. <p>▼ If hypermobility is suspected complete the Beighton score.</p>	<p>Don't hesitate to ask the patient to stand sideways so that you can get a better view. <u>GALS Screen</u>.</p> 
<p>Fibromyalgia tender points</p> 	<p>Walk the patient through a tender points count if you feel it will give you information that you do not already have.</p>	<p>Its hard for patients to landmark the correct spots, I'll often get them to poke around in a few places.</p>

<p>Tender joints count</p> 	<p>Walk the patient through a full tender joint count by giving them instructions on where to place their hands for each joint, and how to stress that joint to check for tenderness. Document the following:</p> <ol style="list-style-type: none"> 1. Painful joints 2. Joints with stress pain 3. Any joints that look different compared to the other 4. Any lumps or bumps 5. Any size differences 	<p>Carefully show the patient exactly where to press on each joint by showing on yourself.</p> <p>Ask the patient with each joint if it is painful. Remind patient to apply enough pressure to blanch their thumbnail, but no more. Anything will be sore if you press hard enough!</p>
<p>Swollen joints count</p> 	<p>Ask patient to show you any joints that they suspect are swollen.</p> <p><i>Squeeze test (this has been validated as a measure of possible disease activity): Ask the patient to wrap one hand around the other hand or foot's metacarpal phalangeal joints/metatarsal phalangeal joints (show them with your own hands) and gently squeeze.</i></p> <ol style="list-style-type: none"> 1. If painful examine for possible joint effusion in that hand/foot and document the tenderness. <p>Ask them to show you the dorsum of their hands by keeping their elbows at their sides, holding their hands up to their chest, wrists flexed, with metacarpal phalangeal joints relaxed and fingers hanging down.</p> <ol style="list-style-type: none"> 2. If their video camera can be moved to look at feet (like their cell phone)- ask them to show you their feet both while standing and sitting to visualize swelling. Note any sock or shoe marks on the skin. <p>▼ If unable to visualize the swelling, ask them to measure the girth of the metacarpal phalangeal joints, proximal interphalangeal joints, wrist, elbow, knee, ankle, or metatarsal phalangeal joints in one limb compared to the other. Direct them to place the tape measure in the same place on both hands- show them with your own limb where to place the tape measure.</p>	<p>Ask the patient to check for warmth if a swollen joint is suspected- direct them to use the back of their hand and ask them if there is a temperature difference between one side and the other (don't ask for warmth).</p>
<p>Grip strength/ muscle strength</p> 	<p>Ask the patient to demonstrate opening a water bottle or jar.</p> <p><i>30 second Sit to stand test can be completed as a measure of strength.</i></p>	<p>Document the size of the jar (example: 500ml)</p> <p>30 Second Chair Stand Test</p>
<p>Cervical spine</p> 	<p>Guide the patient to move through full range of motion.</p> <p><i>Note their head posture in sitting and standing.</i></p>	<p>Ask them to turn sideways to see cervical flexion.</p>

Spine/Posture



Observe both sitting and standing posture from front and side. Note standing posture from behind.

Document:

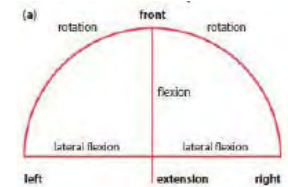
1. Visible shoulder height differences
2. Kyphosis
3. Lordosis

If spondyloarthropathy is suspected:

1. Ask patient to complete "occiput to wall". Ask them to measure the distance from their head to the wall by reporting the number of fingers between their head and the wall (i.e. 2 fingers from the wall to their head).
2. Observe cervical rotation.
3. Ask patient to complete "finger to floor" and either
 - a) estimate the distance between their longest finger to the floor (do both sides), or
 - b) use a ruler or retractable tape measure to note how far their fingertips are from the floor.
4. If a helper is available, walk them through how to complete Schober's and lumbar side flexion (do this one with patient against wall- measure fingertip to floor, then side bend and measure again).

Ask patient to turn sideways while sitting and standing for a side view.

Ask patient to turn their back to the camera while standing.



Jaw



Ask the patient to gently open and close their mouth. Document:

1. Deviation
2. If they report any cracking or locking

Ask the patient to open their mouth as wide as they can, and place their fingers vertically in their mouth- ask "how many fingers can you fit between your teeth?"

Make sure that fingers are vertical and stacked.

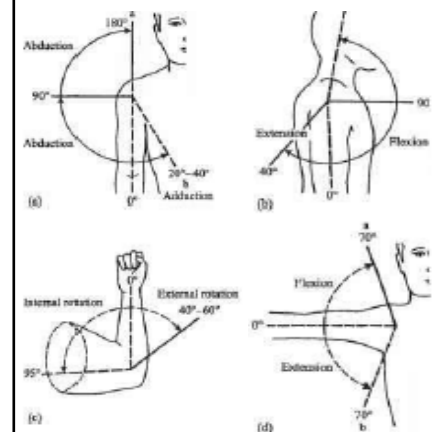
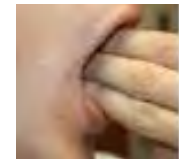
Shoulders/ acromioclavicular joint








Ask the patient to move through full range of motion. Document ability to:

1. Flex arms with palms down- reach fingers to ceiling- try to touch upper arms to ears
2. Abduct arms- palms facing you with thumbs up, reach thumbs to ceiling as if doing a jumping jack
3. Can they reach their thumbs up their back from their waist- how high?
4. Keeping elbows at side and elbows and wrists straight-move/ rotate shoulders so that the palms of hands are facing up, then facing down
5. Shrug shoulders
6. If shoulders look different, document shoulder symmetry
7. If pain is noted through exam, note at which point the pain gets worse (painful arc)







Many provocative tests for the shoulder can be performed by the patient with modifications.



<p>Elbows</p> 	<p>Ask the patient to feel their elbows joints, lateral and medial epicondyles to check for tenderness.</p> <p>Document:</p> <ol style="list-style-type: none"> 1. Any tenderness 2. Bony enlargement 3. Differences in range of motion 	<p>It helps to walk the patient through bony landmarks so that they can find the joint.</p>
<p>Wrists and hands</p> 	<p>Examine the hands closely, looking at the palms of the hands, side view of the hands, and dorsum of the hands.</p> <p><i>Prayer position: Ask patient to press both hands with palms glued together (as far as they go). Note if there is space in between. Is there a prayer sign (space between fingers)?</i></p> <ol style="list-style-type: none"> 1. Next ask patient to keep fingers in same posture, but with hands 2" apart (still in prayer position). <p>Ask the patient to fully flex the fingers- note if there is a full fist, or if fist is loose.</p> <p>Ask the patient to keep metacarpal phalangeal joints straight then only bend proximal interphalangeal joints, distal interphalangeal joints- how much space is between the fingertips and the palm.</p> <p><i>Thumb opposition: What is the furthest that the patient can touch their thumb on the palm of their hand- (Kapandji scale)</i></p> <p>Ask the patient to show you any fingers that trigger/lock- look at the palm of the hand in the affected fingers. Ask the patient to flex and extend the proximal interphalangeal joint while keeping the metacarpal phalangeal joint straight.</p> <ul style="list-style-type: none"> ▼ If numbness is reported in the hands, ask the patient to complete Phalen's test. ▼ Consider Finkelstein's test if you suspect tenosynovitis. ▼ If pain seems diffuse, ask the patient to palpate their finger interspaces. 	<p>Phalen's test</p> <p>Kapandji scale:</p> 
<p>Hips/buttocks/ low back</p> 	<p>Ask patient to cross their leg so that the ankle is on the opposite knee. Document:</p> <ol style="list-style-type: none"> 1. Range of motion 2. Where pain is located <p>Ask the patient to touch their toes from sitting- if they have back pain, ask them how they don/doff their socks/shoes instead. If possible, watch them do this task.</p> <p>Ask the patient to firmly run their hands down their lateral hips. Document any pain.</p> <p>Ask the patient to firmly run hands under buttocks and palpate "sit bones".</p> <p>Ask the patient to firmly run hands down lower back and report tender areas.</p>	<p>Ensure the patient's camera is tilted down so you can see where they are palpating.</p>

<p>Knees</p> 	<p>Ask the patient to show you their knees with their legs extended (sitting on the edge of their chair with legs straight or standing away from camera). Document:</p> <ol style="list-style-type: none"> 1. Size differences 2. Possible effusions 3. Muscle wasting 4. Valgus or varus positioning <p>Ask the patient to palpate around the knee and report what is tender.</p> <p>Ask the patient to cup their knee and extend/flex the knee, and report back (crepitus check).</p>	<p>Show the patient where their patella is in sitting with knees flexed, and direct them to feel for the hollows on each side of the inferior border, then feel across the joint lines.</p>										
<p>Ankles/feet</p> 	<p>Ask the patient to place their video device (works best with a cell phone or laptop) down on the floor to examine the feet and ankles.</p> <p>Ask the patient to palpate all around their ankles and report what is tender. Direct them to check ankle, subtalar, Achilles, and plantar aponeurosis (fascia).</p> <p><i>Visualize any changes if possible, comparing one side to the other.</i></p> <p>Ask them to roll up their pants and observe from the front, back and sides while sitting and standing. Document:</p> <table border="0"> <tr> <td>1. Toe range of motion <i>(ask them to scrunch them with foot flat in weightbearing)</i></td> <td>6. Presence of hair if visible</td> </tr> <tr> <td>2. arches</td> <td>7. Condition of skin</td> </tr> <tr> <td>3. Bony enlargement on toes, midfoot or elsewhere skin.</td> <td>8. Note any sock or shoe marks on the skin</td> </tr> <tr> <td>4. Bony changes/deviations</td> <td>9. Painted toenails</td> </tr> <tr> <td>5. Muscle wasting</td> <td>10. Condition of toenails if visible</td> </tr> </table> <p><i>Note any swelling or edema.</i></p> <ol style="list-style-type: none"> 1. If pitting is suspected, ask patient to press finger, then count how many seconds it takes for skin to return to normal. 2. Notice any sock marks on the calves. <p>Ask patient to remove a shoe (or slipper) and show it to you- document wear patterns, type of shoe. If they are not wearing shoes, ask them to get their daily shoes.</p>	1. Toe range of motion <i>(ask them to scrunch them with foot flat in weightbearing)</i>	6. Presence of hair if visible	2. arches	7. Condition of skin	3. Bony enlargement on toes, midfoot or elsewhere skin.	8. Note any sock or shoe marks on the skin	4. Bony changes/deviations	9. Painted toenails	5. Muscle wasting	10. Condition of toenails if visible	<p>The patient may not be able to show you their feet due to camera positioning, move your own camera (or body) to show them what you want.</p>
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MOOD/GENERAL WELLNESS												
<p>Mood</p> 	<p>Observe and note the patient's mood, cognition, ability to answer questions and follow requests.</p> <p>Note the patient's appearance and general wellness if appropriate.</p> <p>Using an eVisit can be stressful for some and can reveal issues like anxiety.</p>	<p>Consider taking a break from the assessment and do a breathing exercise together.</p>										

FUNCTIONAL ASSESSMENT

<p>Total daily activity</p> 	<p>Ask the patient to read you their step count on their activity tracker for the 7 days prior to the appointment.</p>	<p>If possible, ask them to show you the screen of their phone app, or activity tracker.</p>								
<p>Transfers</p> 	<p>Ask the patient to rise off the chair to stand. If no difficulties:</p> <ol style="list-style-type: none"> 1. Ask them to rise out of the chair using only the arms of the chair. 2. Ask them to cross their arms, then rise out of the chair. 	<p>Only do this if they have reported no balance issues in the history and systems review. If risk of falls, ask them to have someone nearby to help, or to use their walker in front of them, or skip this part.</p>								
<p>Gait</p> 	<p>Ask the patient to walk away from the camera (as far as it allows) and walk back to it using any mobility aids that they normally use.</p> <ol style="list-style-type: none"> 1. Ask patient to hold the back of their chair and raise up onto their toes if balance permits. 	<p>If needed, ask the patient to reposition the camera down a little so that you can visualize their legs and feet.</p>								
<p>Handwriting</p> 	<p>Ask the patient to write a sentence. Note how they hold the pen.</p>	<p>Ask the patient to show you or take a picture of their writing sample.</p>								
<p>Cell phone use</p> 	<p>Observe the patient sending a text on their phone (or another similar task). Pay special attention to:</p> <ol style="list-style-type: none"> 1. Head posture 2. Hand, wrist, elbow and shoulder positioning 									
<p>Other functional tasks</p> 	<p>Ask the patient to show you tasks they are struggling with:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. Knitting/crocheting</td> <td style="width: 50%;">5. Holding a book</td> </tr> <tr> <td>2. Opening a jar or water bottle</td> <td>6. Squat or crouch to reach an object (if no balance issues)</td> </tr> <tr> <td>3. Donning/doffing socks/shoes</td> <td>7. Grasping items like a full coffee cup or a tool</td> </tr> <tr> <td>4. Sitting in favorite chair</td> <td>8. Reach to grab an object (if no balance issues)</td> </tr> </table>	1. Knitting/crocheting	5. Holding a book	2. Opening a jar or water bottle	6. Squat or crouch to reach an object (if no balance issues)	3. Donning/doffing socks/shoes	7. Grasping items like a full coffee cup or a tool	4. Sitting in favorite chair	8. Reach to grab an object (if no balance issues)	
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