



		<ul style="list-style-type: none"> <li>– <b>L</b>: Lung abscess</li> <li>– <b>U</b>: Ulcerative colitis</li> <li>– <b>B</b>: bronchiectasis</li> <li>– <b>B</b>: brachial AV fistula</li> <li>– <b>I</b>: IE, ILD</li> <li>– <b>N</b>: Neoplasia (lung ca, mesothelioma, fibroma)</li> <li>– <b>G</b>: Grave's dz (thyrotoxicosis)</li> </ul>
<p>Radial pulse</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Ensure the ideal site</li> <li><input type="checkbox"/> Comment on the rate &amp; rhythm</li> <li><input type="checkbox"/> Comment on RR</li> </ul>		<ul style="list-style-type: none"> <li>– Place the pads of your index and middle fingers over the right wrist, just lateral to the flexor carpi radialis tendon</li> <li>– Rate; count for 15sec and multiply by 4 (nL rate 60-100 bpm).</li> <li>Abnormalities; <ul style="list-style-type: none"> <li>1. Bradycardia &lt;60</li> <li>2. Tachycardia &gt;100</li> </ul> </li> <li>– Rhythm; regular rhythm (or nL sinus rhythm)</li> <li>Abnormalities; <ul style="list-style-type: none"> <li>1. Regular irregular (atrial tachyarrhythmias w/ fixed AV block)</li> <li>2. Irregular irregular; most common cause is Afib</li> </ul> </li> <li>– Pulse deficit; diff b/w the pulse rate measured by cardiac auscultation and the peripheral pulse rate obtained by palpating the radial artery</li> </ul>
<p>Assess for <b>radio-radial delay</b></p>		<p>Radio-radial delay describes a loss of synchronicity between the radial pulse on each arm, resulting in the pulses occurring at different times.</p> <ul style="list-style-type: none"> <li>– Mention 3 causes: <ul style="list-style-type: none"> <li>1. SCA stenosis (eg, compression by a cervical rib)</li> <li>2. Aortic dissection</li> <li>3. Aortic coarctation</li> </ul> </li> </ul>
<p>Assess for <b>collapsing pulse</b>:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Ask the pt if they have <b>any pain</b> in their rt shoulder.</li> <li><input type="checkbox"/> Palpate the radial pulse w/ your rt hand wrapped around the patient's wrist.</li> <li><input type="checkbox"/> Palpate the brachial pulse w/ your lt hand, whilst also supporting the patient's elbow.</li> <li><input type="checkbox"/> Raise the pt's arm above their head briskly.</li> <li><input type="checkbox"/> Palpate for a collapsing pulse</li> </ul>		<ul style="list-style-type: none"> <li>✍ It's aka waterhammer pulse / Corrigan's pulse.</li> <li>✍ It's commonly found in pt's having aortic regurg, also seen in other conditions which are associated w/ hyperdynamic circulation.</li> <li>✍ Causes: <ul style="list-style-type: none"> <li>– Physiological (eg fever, preg)</li> <li>– Cardiac (eg aortic regurg, PDA)</li> <li>– High output state (eg anaemia, AV fistula, thyrotoxicosis)</li> </ul> </li> </ul>
<p>Brachial pulse</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Support the pt's rt forearm w/ your lt hand.</li> <li><input type="checkbox"/> Position the pt so that their <b>upper arm</b> is <u>abducted</u>, their <b>elbow</b> is <u>partially flexed</u> and their <b>forearm</b> is <u>externally rotated</u>.</li> <li><input type="checkbox"/> W/ your rt hand, palpate med to the biceps brachii tendon and lat to the med epicondyle of the humerus.</li> </ul>		<ul style="list-style-type: none"> <li>✍ Here you have to comment on the <u>character</u> &amp; volume</li> <li>Abnormalities r/t the volume; <ul style="list-style-type: none"> <li>– Large pulse volume</li> <li>Most common cause is <u>arteriosclerosis</u></li> <li>– Low pulse volume</li> <li>Hypovolemia, cardiac tamponade, MS</li> </ul> </li> <li>✍ Character of the pulse: <ul style="list-style-type: none"> <li>– <u>Collapsing pulse</u>; aortic regurg</li> <li>– <u>Slow-rising pulse</u>; aortic stenosis</li> <li>– <u>Pulsus bisferiens</u>; aortic regurg, aortic stenosis, HOCM</li> <li>– <u>Pulsus parvus</u>; low BP</li> <li>– <u>Pulsus altus</u>; arterial HTN</li> <li>– <u>Pulsus paradoxus</u>; cardiac tamponade, constrictive pericarditis, severe obstructive airway dz, croup</li> <li>– <u>Pulsus alternans</u>; severe HF</li> </ul> </li> </ul>
<p>Tell the examiner that you want to measure the BP</p>		<p>Stethoscope, sphygmomanometer</p> <p>Abnormalities;</p> <ul style="list-style-type: none"> <li>– HTN (140/90 or higher)</li> <li>– Hypotension (&lt;90/60)</li> <li>– Wide pulse pressure (a diff &gt;80 b/w BP<sub>sys</sub> and BP<sub>dia</sub>)</li> <li>– Narrow pulse pressure (a diff &lt;25 b/w BP<sub>sys</sub> and BP<sub>dia</sub>)</li> <li>– A diff in BP of &gt; 10mmHg is abnormal.</li> </ul>
<p>Carotid artery "Auscultation"</p>		<p>Be aware that at this point in the examination, the</p>

<ul style="list-style-type: none"> <li><input type="checkbox"/> Correct location (b/w the larynx and the anterior border of SCM muscle)</li> <li><input type="checkbox"/> Prior to palpating the carotid artery, you need to auscultate the vessel to rule out the presence of a bruit.</li> <li><input type="checkbox"/> Use the diaphragm of the stethoscope</li> <li><input type="checkbox"/> <b>Ask the pt to take a deep breath and then hold it whilst you listen.</b></li> </ul>			<p>presence of a 'carotid bruit' may in fact be a radiating cardiac murmur</p>
<p>Carotid pulse "palpation" -if no bruits were identified-</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Correct location (b/w the larynx and the anterior border of SCM muscle)</li> <li><input type="checkbox"/> Ensure the pt is positioned safely on the bed(semirecumbent).</li> <li><input type="checkbox"/> Gently place your fingers b/w the larynx and the anterior border of the SCM muscle to locate the carotid pulse.</li> </ul>			
<p>JVP :</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Position the pt in a semi-recumbent position</li> <li><input type="checkbox"/> Ask the pt to turn their head slightly to the lt.</li> <li><input type="checkbox"/> Inspect for evidence of the IJV, running b/w the medial end of the clavicle and the ear lobe, under the medial aspect of the SCM</li> <li><input type="checkbox"/> Measure the JVP by assessing the vertical distance b/w the <b>sternal angle and the top of the pulsation point of the IJV</b></li> </ul>			<ul style="list-style-type: none"> <li><i>✍</i> nL : 4cm or less.</li> <li><i>✍</i> Waveform: the normal JVP waveform has two distinct peaks per cardiac cycle ( a wave and v wave)</li> <li><i>✍</i> Elevated JVP : <ul style="list-style-type: none"> <li>– Fluid overload, HF</li> <li>– High RV filling pressure, PE, chronic pul HTN, cardiac tamponade, pericardial constriction.</li> <li>– Mechanical obstruction, SVCO</li> </ul> </li> <li><i>✍</i> Kussmaul's sign : <ul style="list-style-type: none"> <li>– Pericardial constriction.</li> <li>– Severe RV failure</li> <li>– Restrictive cardiomyopathy.</li> </ul> </li> </ul>
<p>Eyes</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Conjunctival pallor</li> <li><input type="checkbox"/> Corneal arcus</li> <li><input type="checkbox"/> Xanthelasma</li> <li><input type="checkbox"/> Kayser-Fleischer rings</li> </ul>			<ul style="list-style-type: none"> <li>– <b>Corneal arcus</b> ;hazy white, grey or blue opaque ring located in the peripheral cornea, typically occurring in pts over the age of 60. In older pts, the condition is considered benign, however, its presence in pts under the age of 50 suggests underlying hypercholesterolaemia.</li> </ul>
<p>Mouth</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Central cyanosis</li> <li><input type="checkbox"/> Angular stomatitis</li> <li><input type="checkbox"/> High arched palate</li> <li><input type="checkbox"/> Dental hygiene</li> </ul>			<ul style="list-style-type: none"> <li>– <u>Central cyanosis</u> ;bluish discoloration of the <u>lips and/or the tongue</u> associated w/ hypoxaemia.</li> <li>– <b>High arched palate</b>: a feature of <u>Marfan syndrome</u> which is associated w/ mitral/aortic valve prolapse and aortic dissection.</li> <li>– Poor dental hygiene is a RF for IE</li> </ul>
<p>Inspection of ant chest :</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Scars suggestive of previous thoracic surgery</li> <li><input type="checkbox"/> Pectus excavatum</li> <li><input type="checkbox"/> Pectus carniatum</li> <li><input type="checkbox"/> Visible pulsations</li> <li><input type="checkbox"/> Superficial dilated veins</li> </ul>			<ul style="list-style-type: none"> <li>– Thoracic scars : <ol style="list-style-type: none"> <li>1. <b>Median sternotomy scar</b> ⇒ Valve replacement / CABG</li> <li>2. <b>Anterolateral thoracotomy scar</b></li> <li>3. <b>Infraclavicular scar</b></li> <li>4. <b>Left mid-axillary scar</b> ⇒insertion of a subcutaneous ICD</li> <li>5. <b>Lt submammary scar</b> ⇒ mitral valvotomy.</li> </ol> </li> </ul>
<p>Palpation for apex beat :</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> W/ your fingers placed horizontally across the chest</li> <li><input type="checkbox"/> Typically located in the 5<sup>th</sup> ICS in the MC line .</li> </ul>			<ul style="list-style-type: none"> <li>– <b>Apex beat</b> : is the most lateral and inferior position where the cardiac impulse can be felt.</li> <li>– <u>Impalpable</u> in : <ol style="list-style-type: none"> <li>1. Overweight/muscular ppl</li> <li>2. Pts w/ asthma or emphysema</li> </ol> </li> <li>– <u>Displaced</u> inf &amp; lat : <ul style="list-style-type: none"> <li>LV dilation ( after MI, w/ aortic stenosis, severe HTN, DCM)</li> </ul> </li> <li>– <u>Palpable on the rt</u> ⇒detxtrocardia</li> <li>– <u>Tapping</u> apex beat ; MS</li> <li>– <u>Double apical impulse</u> ; hypertrophic CM</li> </ul>
<p>Palpation for heave</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Place the <b>heel</b> of your hand parallel to the left sternal edge (<u>fingers vertical</u>) to palpate for heaves.</li> <li><input type="checkbox"/> Ask the pt to hold their breath in expiration</li> <li><input type="checkbox"/> If heaves are present you should feel the <i>heel of your hand being lifted w/ each systole.</i></li> </ul>			<ul style="list-style-type: none"> <li>– A parasternal heave is a precordial impulse that can be palpated, associated w/ RV hypertrophy.</li> </ul>

<p>Palpation for thrills</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Place your hand horizontally across the chest wall, w/ the flats of your fingers and palm over the valve to be assessed.</li> <li><input type="checkbox"/> Mitral valve : 5<sup>th</sup> ICS in the MCL</li> <li><input type="checkbox"/> Tricuspid valve : 4<sup>th</sup> ICS at the lower Lt sternal edge.</li> <li><input type="checkbox"/> Pul valve : 2<sup>nd</sup> ICS at the Lt sternal edge</li> <li><input type="checkbox"/> Aortic valve : 2<sup>nd</sup> ICS at the Rt sternal edge</li> </ul>			<ul style="list-style-type: none"> <li>– A thrill is a palpable vibration caused by turbulent blood flow through a heart valve (a thrill is a palpable murmur).</li> <li>– Most common thrill is that of the aortic stenosis</li> <li>– A thrill caused by VSD is best felt at the Lt &amp; Rt sternal edges</li> <li>– Diastolic thrills are very rare</li> </ul>
<p>Auscultation :</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Listen w/ your stethoscope <u>diaphragm</u> at the: <u>apex, lower Lt sternal border, upper rt and Lt sternal borders</u></li> <li><input type="checkbox"/> Listen w/ your stethoscope <u>bell</u> at the : <u>apex, lower Lt sternal border</u></li> <li><input type="checkbox"/> Auscultate the carotid arteries using the diaphragm of the stethoscope whilst the patient holds their breath to listen for radiation of an <u>ejection systolic murmur caused by aortic stenosis</u>.</li> <li><input type="checkbox"/> Sit the pt <u>forwards</u> and auscultate over the aortic area w/ the <u>diaphragm</u> of the stethoscope during <u>expiration</u> to listen for an <u>early diastolic murmur caused by aortic regurgitation</u>.</li> <li><input type="checkbox"/> Roll the patient onto their <u>lt side</u> and listen over the mitral area w/ the <u>diaphragm</u> of the stethoscope during <u>expiration</u> to listen for a <u>pansystolic murmur caused by mitral regurgitation</u>. Continue to auscultate into the <u>axilla</u> to identify radiation of this murmur.</li> <li><input type="checkbox"/> W/ the pt still on their <u>lt side</u>, listen again over the mitral area using the <u>bell</u> of the stethoscope during expiration for a <u>mid-diastolic murmur caused by mitral stenosis</u></li> </ul>			
<p>To complete the exam :</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Palpate for sacral and ankle oedema</li> <li><input type="checkbox"/> Auscultate the lung bases for inspiratory crackles</li> <li><input type="checkbox"/> Examine the abdomen for a pulsatile liver and aortic aneurysm .</li> </ul>			
<p>Thank the pt, wash your hands</p>			
<p>Summarise your findings</p>			