

Revision of CVS Exam Procedure

How you do it – what you find – what it means

Examination Procedure	How is this done?	What you find	What this means
Observation			
Observation of face	Observe pt face lying supine on couch at 45°	Pale	Anaemia, evidence of acute or chronic illness
		Flushed	Malar flush: Mitral stenosis. Exertional dyspnoea, carcinoid syndrome, heart disease, hypertension, stress.
		Cyanosed	If central: Congenital heart disease, cardiac failure, respiratory failure. Peripheral: Raynaud's, peripheral vascular disease, cold
		Dyspnoeic	Heart failure, heart attack, respiratory pathologies.
		Shortness of breath, perspiring, clamminess	Heart or lung pathologies, pyrexia, sympathetic overload
Close inspection of the face	Look around the eyes	Xanthomata around eyes	hyperlipidaemia
	Look at the eyes	Corneal arcus	hyperlipidaemia
		Proptosis	Graves' disease
	Lower eyelids and check conjunctivae	Normal pink/red Excessively red Pale Blue	Normal Pyrexia, infection, local pathology Anaemia Central cyanosis
Inspect the mouth	Ask pt to open mouth, may use pen torch	Colour of mucus membranes: pale, blue Beefy tongue Dry mouth and tongue Mouth ulcers and dental caries Mouth odour	Pale: anaemia Blue central cyanosis Deficiencies of iron, B12 Dehydration Source of infection affecting heart Possible infections, pathologies of lungs, kidneys, diabetes, gastrointestinal.
Close inspection			
Inspection of hands	Check the nails	Finger clubbing	Endocarditis, congenital heart disease also other systems.
		Koilonychia	Iron deficiency anaemia
		Splinter haemorrhages	Infective Endocarditis, vasculitis
		Visible capillary pulsations in nail bed	(Quincke's sign - often seen in aortic regurgitation, can occur in normal individuals if the skin is warm, in hyperthyroidism; can also be seen by pressing a glass slide on an everted lip).
	Squeeze nailbeds	Blanching and capillary refill	Dehydration, anaemia, poor circulation.
	Inspection of fingertips and palms	Osler's nodes and laneway lesions	Infective Endocarditis
		Pale creases	anaemia
		Sweaty palms with terror	Thyrotoxicosis
		Over flexible joints	Marfan's syndrome
Pulse measurement	Use radial artery for beats/min and rhythm Time for 30 to 60 seconds Use Brachial or Carotid	Normal Increased Decreased Character and waveform	Tachycardia: Nervousness, drugs, anaemia, thyrotoxicosis, caffeine, pheochromocytosis Bradycardia: drugs, hypothyroidism, Ischaemia, Hyperkalaemia, Excess vagal tone, hypothermia, heart failure, conduction defects

Examination Procedure	How is this done?	What you find	What this means
Blood pressure measurement	Use brachial artery Arm at heart level	Normal BP 120/80 Increased Decreased	
JVP measurement	Estimate JVP level. Pt at 45° Use int. jugular	Internal jugular not visible Filled up to 3cm above sternal angle Engorged more than 3cm above sternal angle	Not significant / normal Normal Heart failure, pericarditis, lung disease (pulmonary embolus, pulmonary hypertension, fibrosis), cardiac tamponade, fluid overload, SVC obstruction (no wave)
Observation of rest of the body	Observe patient, exposed, thorax, abdomen, arms and legs	Ascites Spider naevi Inspect the legs Skin and nails Trophic changes in skin Oedema- pitting/dependant	
Palpation			
Palpate the precordium	Place the flat of your hand lightly against the chest wall. Start at the apex beat area	Apex beat, character and position, Bruits Palpable murmurs at apex = thrills Heel of hand Lt. sternal border: mvnt = heaves	Displaced mediastinum Cardiomegaly Tumours
Feel the peripheral pulses	Feel the peripheral pulses with index and middle fingers	Pulses: Rate, rhythm, volume, character Abnormal pulses: popliteal, aorta Brachial – Femoral – Carotid – Popliteal - Dorsalis pedis - Posterior tibial. Radio-radial and radio-femoral delay	Peripheral vascular disease
Auscultation			
Auscultation of the precordium	Use the diaphragm or the bell of the stethoscope Mitral Tricuspid Aortic Pulmonary	Normal S1 & S2 sounds (lub-dub) Added sounds: S3, S4, clicks, bruits, murmurs, rubs.	
Auscultation of the peripheral pulses	Carotids Aorta Renals Common iliacs Femorals	Normal = no sound Bruits Timing with systole	

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Additional tests			
Buerger's test	Leg raise and capillary refill	Slow palmar refill	Peripheral vascular disease
Ankle Brachial Index (ABI) test	Doppler needed	ABPI of leg = P.leg / P.arm	Above 0.80 - 0.89 = peripheral vascular disease 1.00 to 0.89 = acceptable 0.89 - 0.5... = arterial disease
Elevated Arms Test	Roos test (abducted arms, repeated clenching of hands)	TOS and subclavian artery	
Adsons test (TOS)		TOS	
Allen's test	Radio-ulnar palmar anastomosis. Clench fist and release radial then ulnar arteries for speed of refill	Popliteal artery patency	
Raynaud's phenomenon test	Place hand in cold water for 1 minute	White fingers	
Ophthalmoscopy			
Respiratory System exam			