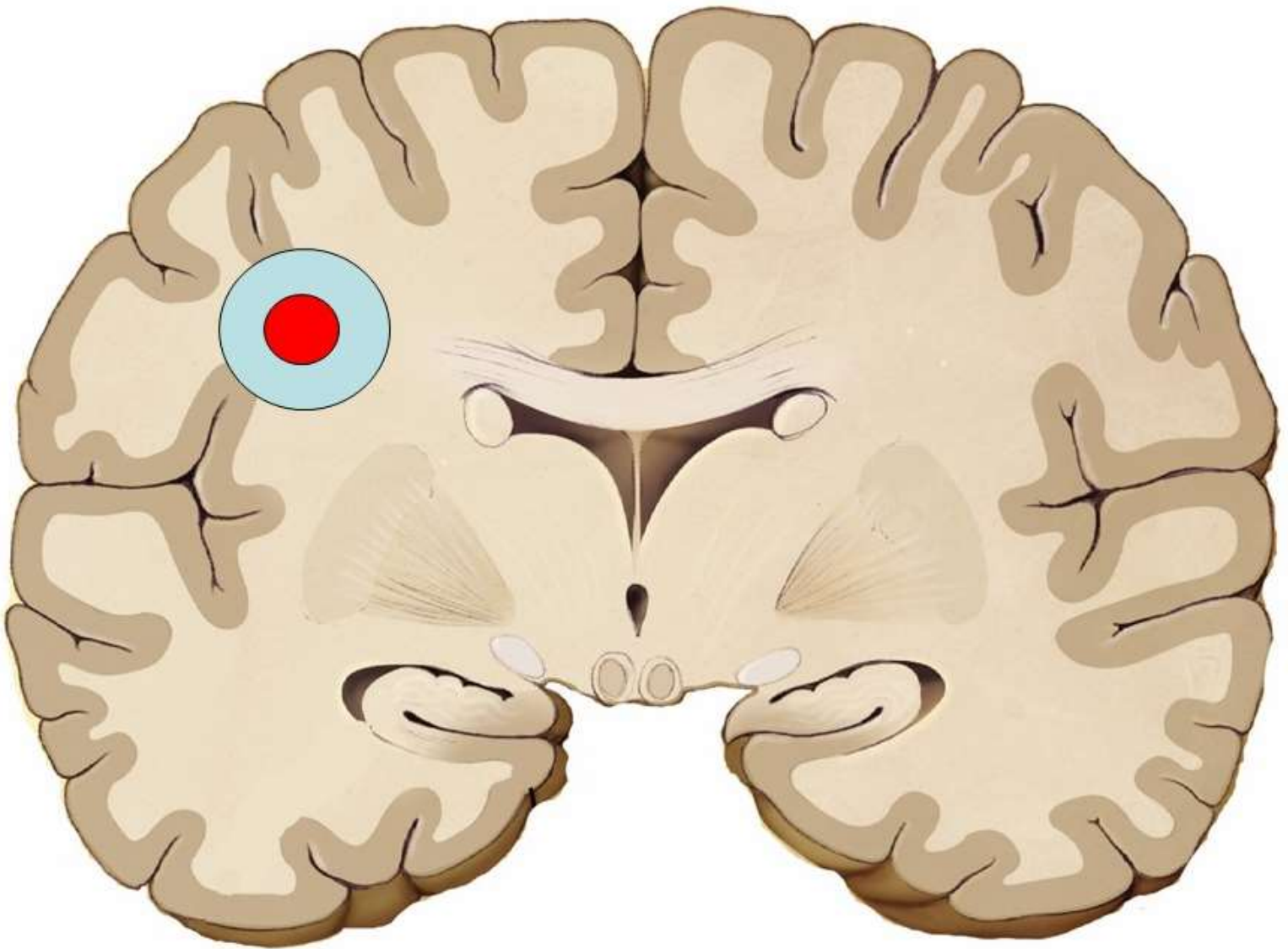


Essential medicine



Ask Doctor Clarke

Course book sample

2023-2024

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Important note

These notes are presented in good faith and every effort has been taken to ensure their accuracy. Nevertheless, it is possible that some errors may have been overlooked. It is always important to check such information, particularly drug indications, contraindications and dosages, with your clinical teachers and with other reliable sources such as NICE, RCOG, RCPI and HSE. Disclaimer: no responsibility can be taken by Doctor Clarke or his co-lecturers for any loss, damage or injury occasioned to any person acting or refraining from action as a result of this information. Please give feedback on this document and report any inaccuracies or ambiguities to support@askdoctorclarke.com

Essential Medicine

Programme

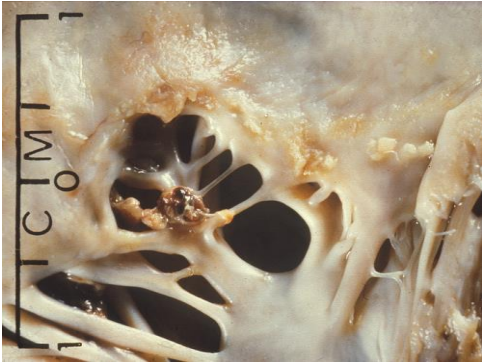
| Time | | Page Number |
|-------|----------------------|-------------|
| 08.00 | Registration | |
| 08.45 | Cardiology quiz | 4 |
| 09.15 | Cardiology | 7 |
| 11.10 | Break | |
| 11.30 | Renal medicine | 23 |
| 12.00 | Neurology | 30 |
| 13.00 | Lunch | |
| 13.40 | Neurology 2 | 38 |
| 15.00 | Rheumatology quiz | 51 |
| 15.15 | Break | |
| 15.30 | Rheumatology | 52 |
| 16.00 | Diabetes | 60 |
| 16.30 | Endocrinology | 66 |
| 17.00 | Respiratory medicine | 73 |
| 17.45 | Close | |

Important Note

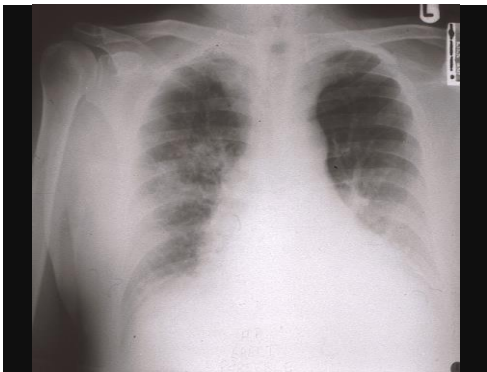
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Cardiology Quiz

1) What physical signs are associated with this disease?



2) This patient presents with sudden onset of breathlessness.



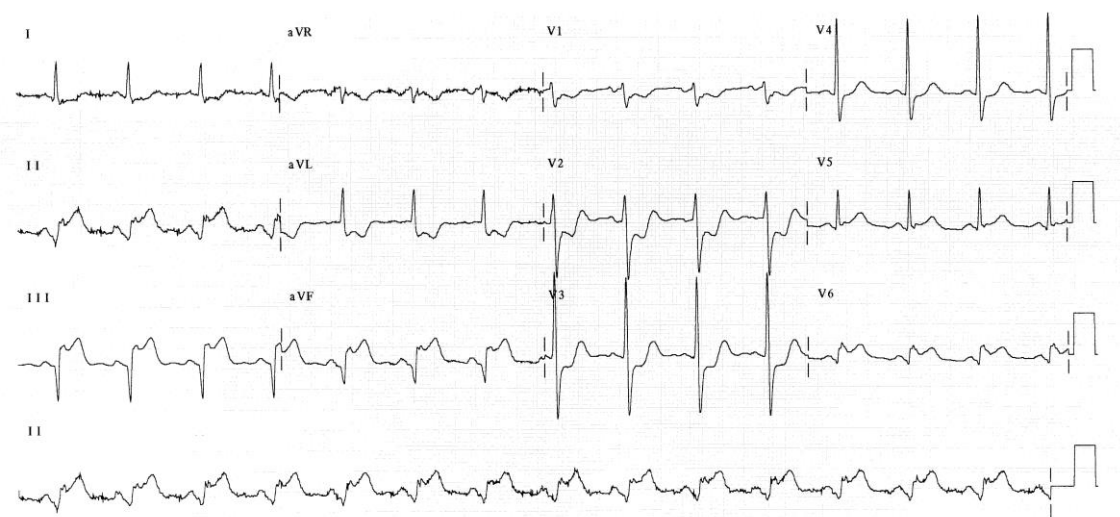
Report on his radiograph:

What physical signs would you expect?

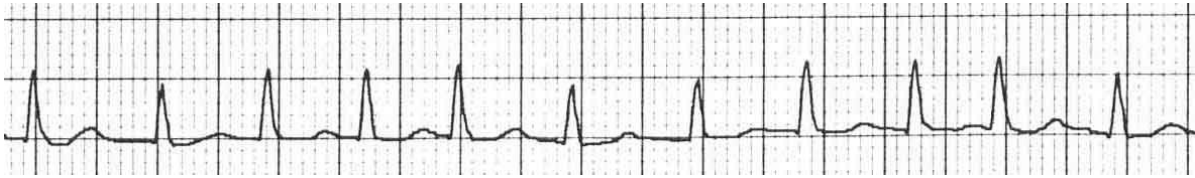
What investigations would you perform in the first 48 hours?

3) Complete the report on this ECG

Rate: 100 P waves: Normal Conclusion:.....
Rhythm: SR QRS:.....
Axis: Normal T waves.....

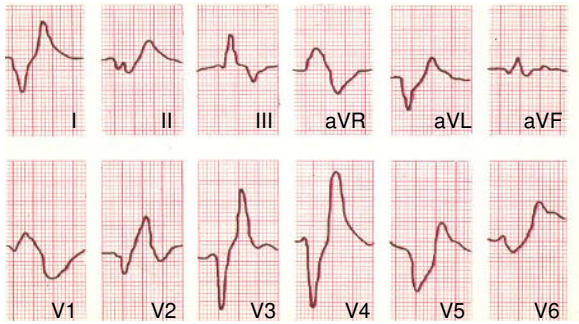


4) Lead 2 rhythm strip- enlarged



What is the rhythm? What are the causes of this rhythm?

5) This ECG is taken from a man presenting with diabetic ketoacidosis. He is very dehydrated and his urine output has been falling. What is the likely diagnosis?



6) What does the lead II of this ECG show?



7) What are the six qualities of pericardial pain?

Introduction

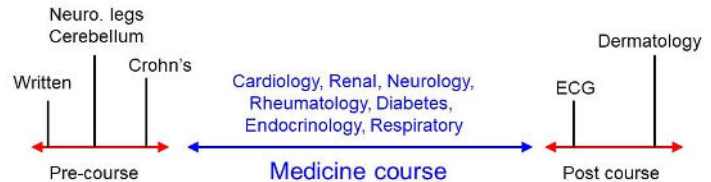
Aims of the course

- Cover the essentials, no small print
- Focus on the clinical exams, but big overlap with written papers
- Refining examination schemes
- Opportunities to test yourself
- Enjoy the day

Evaluation

- *More neurology and endocrine cases*
- *Do big spleens on the Surgery Course*
- *Skip renal medicine*

Course overview



Multiple exam formats

- But the patients are the same and the questions asked are very similar
- The examiners are testing your competence, your safety and your professionalism

Student report

On the day, performance is SO important. The knowledge is not that important - you already know it. It is your presentation and performance that are being assessed

SpR report: examine means look!

Observation at the beginning of an examination is by far the most important part. When I teach students on the ward, they often dive in and palpate the abdomen with the patient still at 45 degrees for example, or they grab the ophthalmoscope without actually looking at the face for ptosis and pupil size which sometimes gives the diagnosis away.

Cardiology

Plan for session

- 1) Examination scheme
- 2) Atrial fibrillation
- 3) Valvular heart disease
- 4) Acute coronary syndrome
- 5) Acute left ventricular failure
- 6) ECG changes of hyperkalaemia
- 7) Post course notes on pacemakers and infective endocarditis

1) Examination Scheme

Examination

- It doesn't matter if you miss some physical signs, so long as your technique is good
- You need to look as though you have a routine, even if it is different from the examiner's: "acceptable variation"
- You need to look caring and competent
- Everyone misses diastolic murmurs!

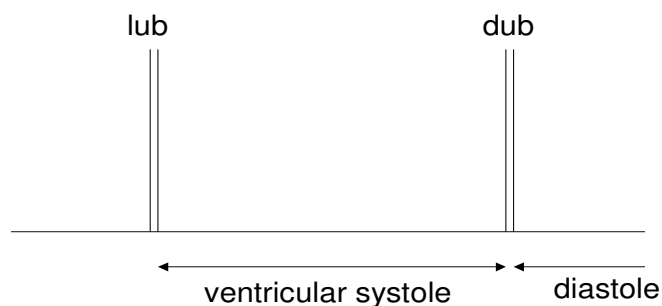
Double message?

- I'm going to demonstrate some heart sounds and murmurs
- I hope this helps with auscultation
- However, remember that the most important part of the cardiovascular examination occurs before using the stethoscope
- And you won't fail for missing or misdiagnosing a murmur

Question stop

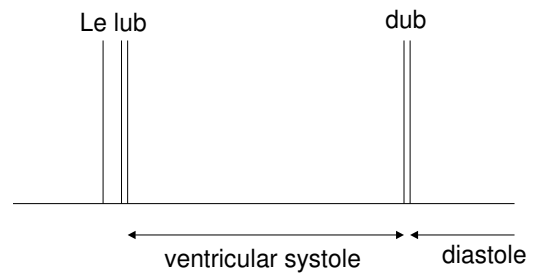
What causes the first and second heart sounds?

Normal heart sounds: lub dub



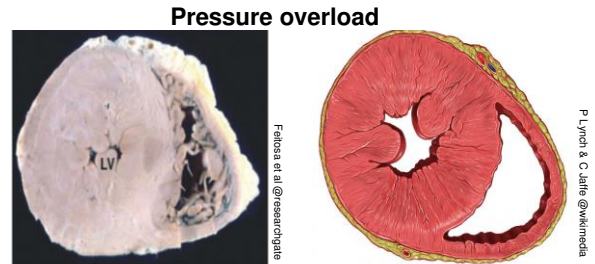
Fourth heart sound

- Atrial contraction into a non-compliant or hypertrophied ventricle
- Low pitched
- “Always abnormal”



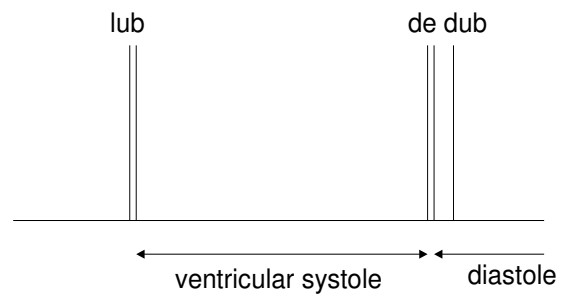
Causes

- Heart failure
- Myocardial infarction
- Cardiomyopathy
- Hypertension (pressure overload)



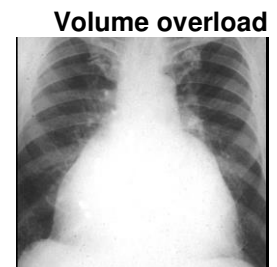
Third heart sound

- Normal in children and young adults up to the age of 30
- A ventricular sound: blood rushing in during rapid filling phase of early diastole
- Stiff or dilated ventricle suddenly reaches its elastic limit and decelerates the incoming rush of blood



Causes of a pathological third heart sound

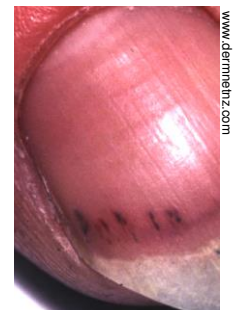
- Heart failure
- Myocardial infarction
- Cardiomyopathy
- Hypertension (pressure overload)
- Mitral and aortic regurgitation (volume overload)
- Constrictive pericarditis



General examination

- Anaemia, cyanosis, breathlessness
- Hands for clubbing and splinters
- Five signs of endocarditis:

2 in the hands (clubbing and splinters)
 1 in the heart (changing murmurs)
 2 in the abdomen (splenomegaly, microscopic haematuria)
 Plus a few rarities (Osler, Roth, Janeway etc)



Stages of clubbing

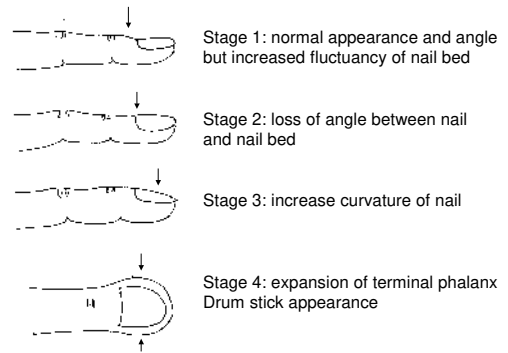
- Increased fluctuancy of nail bed
- Loss of the angle
- Increased curvature of the nail
- Expansion of the terminal phalanx

Schamroth’s window test:

Check for the normal diamond gap between opposed nails



Checking for digital clubbing



Student comment

Every student was told off for saying "I think there's no clubbing". The examiner says: "You think there's no clubbing?" So be confident!!

Buzz words: evidence of digital clubbing

Examination

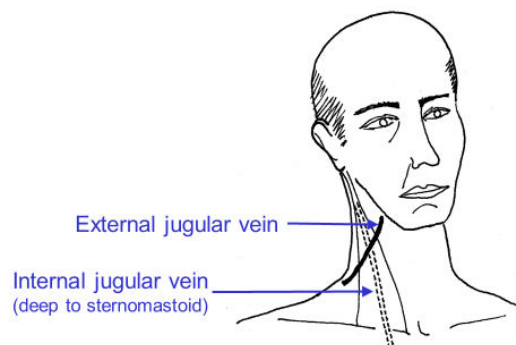
- Anaemia, cyanosis, breathlessness
- Hands for clubbing and splinters
- Pulse- rate, rhythm, character, volume
- Collapsing pulse test
- Ask for or measure blood pressure
- Neck for collapsing pulse
- Then JVP



Collapsing pulse test

Jugular venous pulsation

- Neck relaxed as internal jugular is behind sterno-mastoid which should be relaxed
- Best to look from in front **and** from the side- you are looking for a **pulsation not a visible vein**
- JVP usually has a "double pulsation" compared with arterial pulse- may appear to be "flickering"
- If raised, check for sacral or ankle oedema



Examine the heart

- Is a no-win instruction
- Should be either: examine the cardiovascular system or examine the praecordium
- Occasionally just "Listen here"
- If in doubt, ask for clarification

Praecordium

- Look for scars
- Apex beat: position and character
- Left parasternal area (for right ventricular impulse)
- Check for thrills
- Auscultation- bell and diaphragm from apex to neck
- Patient on left side with the bell for mitral stenosis
- Patient sitting forward, at the end of expiration, using the diaphragm (for aortic regurgitation)

