

Question 1 (12 marks)

A 30 year old male with perianal pain attends your rural emergency department. After your assessment, you diagnose thrombosed external haemorrhoids.

- a) List four (4) clinical features that make conservative treatment appropriate for this patient. (4 marks)

1. _____
2. _____
3. _____
4. _____

- Duration more than 48 hours
- Pain well controlled (not in severe pain)
- Haemorrhoid not bulging under tension.
- Already showing signs of retraction or resolution.
- Small size of the haemorrhoid.
- Any high risk criteria as referred to in part b

- b) List four (4) situations or contraindications where local excision in the emergency department would not be recommended or safe (other than a patient not cooperating or consenting for the procedure). (4 marks)

1. _____
2. _____
3. _____
4. _____

- Pregnant patient
- Immunocompromised patient
- Patient with evidence or suspicion for significant portal hypertension
- Patient with coagulopathy
- Anterior or posterior midline external haemorrhoids (high propensity to become anal fissures with excision)
- Multiple external haemorrhoids
- History of inflammatory bowel disease.
- Patient unsuitable for ED sedation.
- ED clinician not skilled to perform the procedure
- local anaesthetic allergy
- Department workload issues

You decide to perform local excision of this patient's thrombosed external haemorrhoids in the emergency department. Informed consent has been obtained, and the patient is in a safe and appropriate area. You have performed hand hygiene and are wearing PPE.

c) List 4 (four) steps for this procedure. (4 marks)

1. _____

2. _____

3. _____

4. _____

- Position patient – prone, lateral decubitus or lithotomy.
- IV or oral analgesia (+/- ED procedural sedation) prior to commencing procedure.
- Skin preparation/sterilisation
- Field block with local anaesthetic (any suitable agent mentioned in appropriate concentration +/- adrenaline.)
- Elliptical, radial skin incision over the haemorrhoid and excision of skin and haemorrhoidal clot. (Excision or incision and evacuate clot acceptable)
- Pack with gauze and leave to granulate or suture. (see note below)
- Dress with absorbent dressing (suturing not acceptable)

This question covers procedural steps rather than discharge advice, so discharge advice will not score.

Question 2 (12 marks)

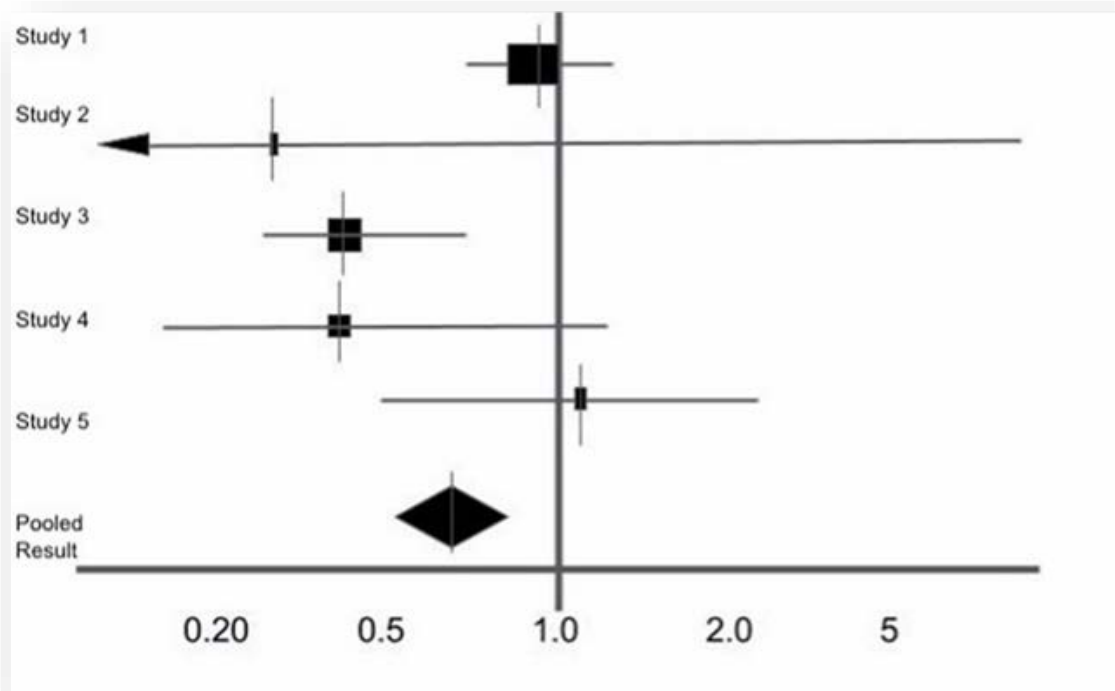
Regarding the appraisal of a meta-analysis of randomised controlled trials (RCTs).

- a) List three (3) essential aspects to appraise when reviewing a meta-analysis of RCTs and give reasoning. (6 marks)

Important aspects of the appraisal (3 marks)	Reasoning (3 marks)

- The pooled results: gives the overall combined results of smaller studies and if it reached significance.
- Heterogeneity: Describes the potential differences between the studies included in the analysis (were oranges compared to oranges?). Inclusion & Exclusion criteria/focus of metaanalysis - comparing like studies
- Publication bias: describes the bias that may result from unpublished/unreported studies, especially those with negative findings.
- Patient cohort: Applicability to your work environment
- Quality of included studies - potential of skewing bias. "Rubbish in=rubbish out"
- Bias in the conduct of the metaanalysis - drug company marketing/ govt input

A visual display of systematic review data is reproduced as provided below.



b) State what this visual display of data is called. (1 mark)

1. _____

- Forest Plot

c) State what the horizontal and vertical axes represent. (2 marks)

Horizontal Axis (1 mark)	Vertical Axis (1 mark)

- Horizontal: odds ratio, relative risk of outcome OR measure of treatment (either acceptable)
- Vertical: line of no effect

d) State which study had the largest sample size. (1 mark)

1. _____

- Study 1 = largest square

e) State the study/studies that did not achieve statistical significance and why. (2 marks)

Study/Studies:

Rationale:

- Studies 1,2,4 and 5 (NOT 3)
- Horizontal lines representing 95 % confidence intervals cross the line of no effect.