Clinical Questions

1. What is an operational concept of acute abdomen?

Ans: any abdominal condition of acute onset from various causes involving the intraabdominal organs that requires immediate/urgent intervention

Clinical Questions

2. What are the two general categories of acute abdomen?

Ans: Acute Surgical abdomen Acute Non-Surgical Abdomen

Clinical Questions

3. What are reliable symptoms and signs (more than 90% certainty) that will indicate that patients with acute abdominal pain will need surgical treatment?

Ans: Abdominal pain and tenderness with signs of peritoneal irritation
Clinical Questions

4. What are reliable symptoms and signs (more than 90% certainty) that a patient has peritonitis that needs urgent celiotomy?

Ans:
-- Definite (persistent, progressive) direct tenderness with at least guarding
-- Abdominal rigidity

Clinical Questions

5. What are reliable symptoms and signs (more than 90% certainty) that a patient has mechanical intestinal obstruction that needs urgent celiotomy?

Ans:
- Abdominal distention
- Fecaloid vomiting/NGT output
- Definite (persistent, progressive) direct tenderness with at least guarding
- Abdominal rigidity

Clinical Questions

6. What are reliable symptoms and signs (more than 90% certainty) that a patient has massive upper gastrointestinal bleeding that needs urgent celiotomy?

Ans:
- Hemodynamic instability
- Massive Hematemesis/melena

Clinical Questions

7. What are reliable symptoms and signs (more than 90% certainty) that a patient has massive lower gastrointestinal bleeding that needs urgent celiotomy?

Ans:
- Hemodynamic instability
- Massive hematochezia
Clinical Questions
8. What are reliable symptoms and signs (more than 90% certainty) that a patient with abdominal trauma needs urgent celiotomy?

Ans:
- Hemodynamic instability
- Definite (persistent, progressive) direct tenderness with at least guarding
- Abdominal rigidity

Clinical Questions
9. What are reliable symptoms and signs (more than 90% certainty) that a patient has perforated abdominal viscus that needs urgent celiotomy?

Ans:
- Definite (persistent, progressive) direct tenderness with at least guarding
- Abdominal rigidity

Clinical Questions
10. What are reliable symptoms and signs (more than 90% certainty) that a patient has intraabdominal abscess that needs urgent celiotomy?

Ans:
- Definite (persistent, progressive) direct tenderness with at least guarding
- Abdominal rigidity
- Fever

Clinical Questions
11. What are reliable symptoms and signs (more than 90% certainty) that a patient has ascending cholangitis that needs urgent celiotomy?

Ans:
- RUQ abdominal (persistent, progressive) tenderness
- Jaundice
- Fever
- Hemodynamic instability
Clinical Questions
12. If a paraclinical diagnostic procedure is needed in a patient with suspected peritonitis, what is the most cost-effective procedure?

Ans: serial abdominal physical examination

Clinical Questions
13. If a paraclinical diagnostic procedure is needed in a patient with suspected mechanical intestinal obstruction, what is the most cost-effective procedure?

Ans: plain abdominal xray

Clinical Questions
14. If a paraclinical diagnostic procedure is needed in a patient with suspected massive upper gastrointestinal bleeding, what is the most cost-effective procedure?

Ans: NGT

Clinical Questions
15. If a paraclinical diagnostic procedure is needed in a patient with suspected massive lower gastrointestinal bleeding, what is the most cost-effective procedure?

Ans: colonoscopy

Endoscopy (colonoscopy or sigmoidoscopy) is the test of choice for the structural evaluation of lower gastrointestinal bleeding. Angiography should be reserved for those patients with massive, ongoing bleeding when endoscopy is not feasible, or with persistent/recurrent hematochezia when colonoscopy has not revealed a source. There is no role for barium enema in the evaluation of acute, severe hematochezia.
Clinical Questions
16. If a paraclinical diagnostic procedure is needed in a patient with suspected penetrating abdominal trauma, what is the most cost-effective procedure?

Ans: - wound exploration

Clinical Questions
17. If a paraclinical diagnostic procedure is needed in a patient with suspected perforating abdominal trauma, what is the most cost-effective procedure?

Ans: - CXR-PA

Clinical Questions
18. If a paraclinical diagnostic procedure is needed in a patient with suspected perforated abdominal viscus, what is the most cost-effective procedure?

Ans: - CXR-PA

Clinical Questions
19. If paraclinical diagnostic procedure is needed in a patient with suspected intraabdominal abscess, what is the most cost-effective procedure?

Ans: - UTZ is 90% accuracy/cost effective
- CT 95% accuracy rate but not cost effective

Saber A, Intrabdominal Abscess
September 2003
Or visit www.amedicine.com
Clinical Questions

20. If a paraclinical diagnostic procedure is needed in a patient with suspected ascending cholangitis, what is the most cost-effective procedure?

Ans:
- UTZ 95% accuracy rate

21. If a paraclinical diagnostic procedure is needed in a patient with suspected mesenteric vascular occlusion, what is the most cost-effective procedure?

Ans:
- CT scan diagnostic procedure of choice
- Duplex scan


TREATMENT GOALS

22. What is the most cost-effective operative treatment (or principles of surgical operative) for the following:

- Peritonitis
- Mechanical intestinal obstruction
- Massive upper gastrointestinal bleeding
- Massive lower gastrointestinal bleeding
- Penetrating and perforating abdominal trauma
- Blunt abdominal trauma
- Perforated abdominal viscera
- Abdominal abscess
- Ascending cholangitis
- Mesenteric vascular occlusion
**TREATMENT GOALS**

*Peritonitis*
- Identification of cause
- Control the infection
  1. Laparotomy
  2. Peritoneal lavage
  3. Adequate antibiotic coverage

*Mechanical intestinal obstruction*
- Identification of cause
- Relieve the obstruction
- Restore bowel continuity (if stable)

*Massive upper gastrointestinal bleeding*
- Identification of cause
- Control the bleeding
  1. Laparotomy
  2. Peritoneal lavage

*Massive lower gastrointestinal bleeding*
- Identification of cause
- Control the bleeding
  1. Laparotomy
  2. Peritoneal lavage
TREATMENT GOALS
Penetrating and perforating abdominal trauma
- Identification of cause
- Control the infection/perforation/bleeding
- Restore bowel continuity
  1. Laparotomy
  2. Peritoneal lavage

1. Laparotomy
2. Peritoneal lavage

TREATMENT GOALS
Blunt abdominal trauma
- Identification of cause
- Control the infection/bleeding
- Repair injury (depend on severity and affected organ)
  1. Laparotomy
  2. Peritoneal lavage

TREATMENT GOALS
Perforated abdominal viscera
- Identification of cause
- Control the infection
- Restore bowel continuity
  1. Laparotomy
  2. Peritoneal lavage
  3. Adequate antibiotic coverage

1. Laparotomy
2. Peritoneal lavage
3. Adequate antibiotic coverage

TREATMENT GOALS
Abdominal abscess
- Identification of cause
- Control the infection
  1. Laparotomy
  2. Peritoneal lavage
  3. Adequate antibiotic coverage
TREATMENT GOALS

**Ascending cholangitis**
- Decompression
- Relief of the obstruction (if patient is stable / cause can be identified)
- Control the infection

**Mesenteric vascular occlusion**
- Identify the underlying cause of the patients hypercoagulable state

Massive upper gastrointestinal bleeding and lower gastrointestinal bleeding

Goals of management
- resuscitation and stabilization (preventing exsanguination)
- identifying the anatomic level of bleeding
- diagnosing the cause
- providing specific therapy

Clinical Questions

23. What is the best timing for an emergency celiotomy?

Ans: upon diagnosis and optimization of patient usually within 6 hours
24. What is a rationale use of bowel preparation preop?
   – To decrease the fecal/microbial load

25. What are the indications for intraabdominal drain after the abdominal procedure?
   – Intrabdominal drains are used as a signal drain

26. What is/are the most cost-effective procedure in preventing celiotomy wound infection?
    Ans: partial wound closure

27. What is/are the most cost-effective procedure in preventing intestinal anastomotic leak?
    – Proper suturing technique
    – High level of consciousness
Clinical Questions

28. What is/are the most cost-effective procedure in preventing postop intraabdominal abscesses?
   – Adequate abdominal exploration
   – Avoidance of retention or pockets of abscess
   – Good surgical technique

29. What is/are the most cost-effective procedure in preventing abdominal wound dehiscence?
   – Proper surgical technique
   – Correct apposition of fascia with adequate margins
   – Continuous absorbable monofilament

30. What is/are the parameters to use in adequate peritoneal lavage?
   – Clear peritoneal fluids
   – No retained intraabdominal abscess

References

References


