Akut Abdomen
Aspek klinis dan diagnosis

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ASPEK KLINIS

AKUT ABDOMEN
“The general rule can be laid down that the majority of severe abdominal pains which ensue in patients who have been previously fairly well, and which last as long as six hours, are caused by conditions of surgical import.”

(Zachary Cope, 1881–1974)
Contoh kasus

Pasien laki laki 65 th dg nyeri perut seluruh lapang perut, tidak bisa BAB dan tidak bisa kentut, GCS 15, T 120/70, Nadi 90 x/menit, RR 20 x/mnt, suhu 37, saturasi O2 98%

Apa diagnosis pasien ini?
PENDAHULUAN

• Kemajuan teknologi imaging
• Black box
• Anamnesis dan pemeriksaan fisik yang teliti
• 2 pertanyaan kritis: apa diagnosis dan apakah perlu laparotomi emergensi?

Assesment of acute abdominal symptoms,
Norton surgery, basic science and clinical evidence 2008
Definisi

• Keadaan klinis akibat kegawatan di rongga perut yang biasanya timbul mendadak dengan nyeri sebagai keluhan utama. Sebagian memerlukan terapi pembedahan.

• Abdomen akut berkisar antara 5 – 10 % dari semua kasus emergency dari 5 – 10.000 pasien di United States. Penelitian lain mendapatkan sekitar 25 %.
The Problem
Most major textbooks contain a long list of possible causes for acute abdominal pain, often enumerating 20–30 “most common” etiologies.
Trik dan tips

**clinical pattern:**
- 1. abdominal pain with shock
- 2. generalized peritonitis
- 3. localized peritonitis
- 4. bowel obstruction
- 5. medical illness

**Therapy options:**
- 1. surgery now
- 2. surgery tomorrow morning
- 3. conservative
- 4. discharge home
“Often the most difficult surgical decision is when not to operate“
1. Abdominal pain with shock

- Abdominal apoplexy: pale, diaphoretic, severe abdominal pain, hipotensi

- Contoh: ruptur aneurisma aorta, Kehamilan ektopik terganggu (KET)

- Mirip: severe acute pancreatitis, acute mesenteric ischemic
2. Generalized peritonitis

- Diffuse abdominal pain (sick & toxic)
- Lies motionless
- Peritoneal sign (tenderness, rebound tenderness, defans musculer)

- Contoh: ulkus pepticum perforasi, apendisitis perforasi, colon perforasi
Apendisitis perforasi
3. Localized peritonitis

- Apendisitis akut
- Kolesistitis akut
- Divertikulitis colon sigmoid
Apendisitis akut
4. Bowel obstruction

- Small bowel obstruction
- Large bowel obstruction

- Contoh: Hernia incarcerata, tumor kolorektal, gallstone ileus, adhesion intestinal
Bowel obstruction ec. adhesi
Bowel obstruction
Large bowel obstruction
5. Medical illness

- Inferior acute myocard infark
- Diabetic ketoasidosis
- Basal pneumonia
- HIV (mimic an acute abdomen)
diagnosis

AKUT ABDOMEN
Assessment of acute abdominal pain

- Anamnesis dan pemeriksaan fisik yang teliti
- Imaging dan pemeriksaan penunjang

- 2 pertanyaan kritis: apa diagnosis dan apakah perlu laparotomi emergensi?
Principles of history-taking

• Identify the reason for consultation
• Identify the duration and evolution of the problem
• Recognise the most likely organ or system affected
• Recall the relevant leading questions
• Select the most likely pathology from a list of differential diagnoses

Bailey & love, short practice of surgery, 26th ed, 2012
Classic presentations of abdominal pathology

- Obstructive and inflammatory pathology must be excluded in patients with abdominal pain and altered bowel habit
- Closed-loop obstruction with tenderness in the right iliac fossa is indicative of imminent caecal rupture
- Caecal cancer classically presents with anaemia
- Patients who have had previous abdominal surgery may have adhesions
- Check carefully for small incarcerated hernias, particularly femoral, in obese patients

Bailey & love, short practice of surgery, 26th ed, 2012
## Nyeri abdomen

<table>
<thead>
<tr>
<th>Saraf</th>
<th>Reseptor</th>
<th>Spesifikasi nyeri</th>
<th>Lokasi</th>
<th>Rangsangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visceral</td>
<td>s. otonom</td>
<td>Peritonium visceralis</td>
<td>Sukar dijelaskan</td>
<td>Sukar ditunjuk</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tarikan, regangan, kontraksi berlebih</td>
</tr>
<tr>
<td>Somatik</td>
<td>s. tepi</td>
<td>Peritonium parietalis</td>
<td>Jelas, tajam, menusuk</td>
<td>Dapat ditunjuk</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rabaan, tekanan</td>
</tr>
</tbody>
</table>
Figure 34-3 Common sites of referred abdominal pain.
Pemeriksaan Fisik

Status generalis
Keadaan umum
• Tanda Vital : nadi, Tekanan darah, Pernafasan, Suhu

Status lokalis abdomen:
  inspeksi, auskultasi, perkusi, palpasi, rectal toucher
Pemeriksaan Fisik

- Pemeriksaan abdomen
  - Inspeksi: datar/cembung, warna kulit, gambaran & gerakan usus
  - Auskultasi: bising usus
  - Perkusi: nyeri ketok, pekak hepar
  - Palpasi: nyeri tekan, nyeri lepas defense muskuler, massa tumor
### Common cause acute abdomen

#### Table 2. Comparison of common causes of abdominal pain

<table>
<thead>
<tr>
<th>Causes</th>
<th>Onset</th>
<th>Location</th>
<th>Characteristics</th>
<th>Description</th>
<th>Radiation</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendicitis</td>
<td>Gradual</td>
<td>Periumbilical early; RLQ late</td>
<td>Diffuse early, localized late</td>
<td>Ache</td>
<td>None</td>
<td>++</td>
</tr>
<tr>
<td>Cholecystitis</td>
<td>Acute</td>
<td>RUQ</td>
<td>Localized</td>
<td>Constricting</td>
<td>Scapula</td>
<td>++</td>
</tr>
<tr>
<td>Pancreatitis</td>
<td>Acute</td>
<td>Epigastric, back</td>
<td>Localized</td>
<td>Blunt</td>
<td>Back</td>
<td>++ to +++</td>
</tr>
<tr>
<td>Diverticulitis</td>
<td>Gradual</td>
<td>LLQ</td>
<td>Localized</td>
<td>Ache</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Perforated peptic ulcer</td>
<td>Sudden</td>
<td>Epigastric</td>
<td>Localized early, diffuse late</td>
<td>Burning sensation</td>
<td>None</td>
<td>+++</td>
</tr>
<tr>
<td>Small bowel obstruction</td>
<td>Gradual</td>
<td>Periumbilical</td>
<td>Diffuse</td>
<td>Cramping</td>
<td>None</td>
<td>++</td>
</tr>
<tr>
<td>Ruptured abdominal aortic aneurysm</td>
<td>Sudden</td>
<td>Abdominal, back, flank</td>
<td>Diffuse</td>
<td>Tearing</td>
<td>None</td>
<td>+++</td>
</tr>
<tr>
<td>Mesenteric ischemia/infarction</td>
<td>Sudden</td>
<td>Periumbilical</td>
<td>Diffuse</td>
<td>Sharp</td>
<td>None</td>
<td>+++</td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td>Gradual</td>
<td>Periumbilical</td>
<td>Diffuse</td>
<td>Spasmodic</td>
<td>None</td>
<td>+ to ++</td>
</tr>
<tr>
<td>Pelvic inflammation</td>
<td>Gradual</td>
<td>LQ, pelvic</td>
<td>Localized</td>
<td>Blunt</td>
<td>Upper thigh</td>
<td>++</td>
</tr>
<tr>
<td>Ruptured ectopic pregnancy</td>
<td>Sudden</td>
<td>LQ, pelvic</td>
<td>Localized</td>
<td>Sharp</td>
<td>None</td>
<td>++</td>
</tr>
</tbody>
</table>

+ = mild; ++ = moderate; +++ = severe; LLQ = left lower quadrant; RLQ = right lower quadrant; RUQ = right upper quadrant
Clinical features of peritonitis

• Abdominal pain, worse on movement, coughing and deep respiration
• Pyrexia (may be absent), Raised pulse rate

• Tenderness ± guarding/rigidity/rebound of abdominal wall, Pain/tenderness on rectal/vaginal examination
• Absent or reduced bowel sound

• systemic inflammatory response syndrome (SIRS), multiorgan dysfunction syndrome (MODS)) in later stages
The Hippocratic facies in terminal diffuse peritonitis

Bailey & love, short practice of surgery, 26th ed, 2012
Classical position adopted to ease pancreatic pain (patient with chronic pancreatitis)

Cullen’s and Grey Turner’s sign of skin discolouration of flanks and around umbilicus

Bailey & love, short practice of surgery, 26th ed, 2012
Cardinal clinical features of acute bowel obstruction

- Abdominal pain
- Distension
- Vomiting
- Absolute constipation
### Features of bowel obstruction

<table>
<thead>
<tr>
<th>In high small bowel obstruction</th>
<th>In low small bowel obstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• vomiting occurs early, is profuse and causes rapid dehydration.</td>
<td>• pain is predominant with central distension.</td>
</tr>
<tr>
<td>• Distension is minimal with little evidence of dilated small bowel loops on abdominal radiography</td>
<td>• Vomiting is delayed.</td>
</tr>
<tr>
<td></td>
<td>• Multiple dilated small bowel loops are seen on radiography</td>
</tr>
</tbody>
</table>

*Bailey & love, short practice of surgery, 26th ed, 2012*
In large bowel obstruction

- distension and pronounced.
- Pain is less severe
- vomiting and dehydration are later features.
- The colon proximal to the obstruction is distended on abdominal radiography.
- The small bowel will be dilated if the ileocaecal valve is incompetent

Bailey & love, short practice of surgery, 26th ed, 2012
Pemeriksaan penunjang

**Laboratorium**
Darah lengkap
Biokimia darah: amylase, lipase, glukosa, kreatinin, faal hepar
Urinalisa

**Radiologi**
Abdomen polos berbaring, tegak/dekubitus
Thorax
USG
CT scan abdomen
**Imaging apa yang dipilih?**

<table>
<thead>
<tr>
<th>X-ray polos abdomen?</th>
<th>USG abdomen / CT scan abd?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bowel obstruction</td>
<td>• Cairan bebas: pus, darah</td>
</tr>
<tr>
<td>• Peritonitis / perforasi hollow organ</td>
<td>• Abses hepar, cholecystitis, pancreatitis</td>
</tr>
<tr>
<td></td>
<td>• Cancer colorectal</td>
</tr>
<tr>
<td></td>
<td>• Problem ginekologis</td>
</tr>
<tr>
<td></td>
<td>• Apendisitis</td>
</tr>
<tr>
<td></td>
<td>• Peritonitis dan Bowel obstruction</td>
</tr>
</tbody>
</table>
imaging

X-ray polos abdomen

CT scan abdomen
Kasus Perforasi gaster
(free air appearance)
Alogaritma akut abdomen

Figure 5. Algorithm of evaluation approach in patients with abdominal pain ABC=airway, breathing, circulation; CT=computed tomography; FAST=focused abdominal sonogram for trauma; RLQ=right lower quadrant; RUQ=right upper quadrant; USG=ultrasonography. *For Left Lower Quadrant pain, the possible diagnosis is diverticulitis.9
RESUME

• Diagnosis akut abdomen dapat ditegakkan dengan :
• 1. anamnesis dan pemeriksaan fisik yang teliti
• 2. pemilihan tools diagnostik (imaging) yang tepat.
TERIMA KASIH