Health-Process-Evidence-Based Clinical Practice Guidelines for Peritonitis

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1. What is the OMMC Surgery's operational concept of peritonitis?

Peritonitis- inflammation involving the parietal peritoneum

2. What are the causes of peritonitis?

Presence of the following inside the peritoneal cavity:

1. Infectious material (bacteria, TB, fungi, viruses)
2. Inflammatory material (chemicals, cytokines, foreign bodies)

3. What are the types of peritonitis?

A. Based on agent of cause
   1) Microbial- bacterial, TB, fungal, viral
   2) Noninfectious- chemical, physical, cytokine
B. Based on origin of cause (table 1)
   1º, 2º, 3º
C. Based on specific cause (table 2)
D. Based on extent of involvement
   1) Localized
   2) Generalized

Table 1- Types of Peritonitis Based on Origin of Cause

Origin	Causes	Predisposition
1°	without obvious source of contamination	ascites CAPD
2°	with gross contamination of peritoneal cavity	perforation adj inflammation
3°	with persistence of surgically addressed 2° peritonitis	devitalized tissues foreign bodies

Table 2- Types of Peritonitis Based on Specific Cause

Origin	Microbial	Noninfectious
Pseudo		Lead, Porphyric, Drug
1°	Spontaneous bacterial, TB, Viral	Periodic peritonitis Hyperlipidemia
	Most peritoneal dialysis catheter associated	Some CAPD
2° to	Perforation of viscus	Bile
	Ischemia of viscus	Endotoxin
	Adjacent visceral infection	Early adjacent visceral inflammation
3°	Persistent, Recurrent	Foreign body, Talc

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

Persistent or progressive abdominal tenderness and guarding.

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

Serial abdominal examination (observation).

6. What is the most cost effective treatment in patients with peritonitis?

Depends on type of peritonitis, e.g.

A. Noninfectious or viral peritonitis- supportive
B. Spontaneous bacterial peritonitis- antibiotics
C. TB peritonitis- antituberculosis drugs
D. 1º in CAPD- antibiotics + removal of catheter if antimicrobials fail
E. Secondary peritonitis- address the cause e.g. prevent further contamination by repairing the perforation ± antibiotics
F. Persistent/ recurrent peritonitis- surgery + antimicrobials for hospital pathogens

7. What are conditions that a patient with peritonitis do not need surgery?

1. 1º peritonitis
2. 2º peritonitis from uncomplicated inflammation of vital viscera
3. Noninfectious peritonitis except when involving macro foreign bodies

8. What are the treatment goals for peritonitis?

1. Resolve the infection
2. Prevent complications

9. What is the best timing for surgery in patients with peritonitis?

A. Peritonitis 2º to visceral ischemia- before gangrene (~4hrs) sets in.

B. Generalized peritonitis 2º to visceral perforation- as soon as possible after adequate (not necessarily complete) resuscitation.

C. Localized peritonitis 2º to visceral perforation- as soon as optimized.

D. 3º peritonitis- as soon as optimized.

E. 2º to uncomplicated non-vital visceral infections that would recur, semi-elective if initially responsive to antibiotics.

10. What is/are the most cost-effective procedure in preventing postop complications?

Use of drain when necessary, only when necessary.

Proper choice of antibiotics when necessary.

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