

Cholecystitis Treatment Guidelines

Surgical Treatment of ACC

- The World Society of Emergency Surgery (WSES) recommends laparoscopic cholecystectomy as the first-line treatment for patients with acute calculus cholecystitis (ACC).
- The WSES recommends avoiding laparoscopic cholecystectomy in case of septic shock or absolute anaesthesiology contraindications.
- Laparoscopic cholecystectomy is generally considered the standard technique for the removal of gallstones. Local inflammation, especially in gangrenous and emphysematous ACC, has been considered to increase the risk of bile duct injuries, blood loss, operative time, general morbidity and mortality rates in comparison with open surgery.
- The WSES suggests performing laparoscopic cholecystectomy for ACC patients with Child's A and B cirrhosis, patients with advanced age (including more than 80 years old) and patients who are pregnant.
- The WSES recommends laparoscopic or open subtotal cholecystectomy in situations in which anatomic identification is difficult and in which the risk of iatrogenic injuries is high.
- The WSES recommends conversion from laparoscopic to open cholecystectomy in case of severe local inflammation, adhesions, bleeding from the Calot's triangle or suspected bile duct injury.

Timing of Cholecystectomy in People with ACC

- The WSES recommends laparoscopic cholecystectomy as the first-line treatment for patients with ACC.
- The WSES suggests delayed laparoscopic cholecystectomy (DLC) to be performed beyond 6 weeks from the first clinical presentation, in case early laparoscopic cholecystectomy (ELC) cannot be performed (within 7 days of hospital admission and within 10 days of onset of symptoms).

Alternative Treatment for Patients with ACC Who Are Not Suitable for Surgery

- The WSES suggests considering non-operative management (NOM), i.e. best medical therapy with antibiotics and observation, for patients refusing surgery or those who are not suitable for surgery.
- The WSES suggests alternative treatment options for patients who fail NOM and who still refuse surgery or patients who are not suitable for surgery.
- Immediate laparoscopic cholecystectomy is superior to percutaneous transhepatic gallbladder drainage (PTGBD) in high risk patients with ACC. We recommend laparoscopic cholecystectomy as the first-choice treatment in this group of patients.
- The WSES recommends performing gallbladder drainage in patients with ACC who are not suitable for surgery, as it converts a septic patient with ACC into a non-septic patient.
- Delayed laparoscopic cholecystectomy is suggested after reduction of perioperative risks to decrease readmission for ACC relapse or gallstone-related disease.
- In patients with ACC who are not suitable for surgery, endoscopic transpapillary gallbladder drainage (ETGBD) or ultrasound-guided transmural gallbladder drainage (EUS-GBD) should be considered safe and effective alternatives to PTGBD, if performed in high-volume centers by skilled endoscopists.

- If endoscopic transpapillary gallbladder drainage is performed, both endoscopic nasogastric endoscopic gallbladder drainage (ENGBD) and endoscopic gallbladder stenting (EGBS) should be considered suitable options, based on patient characteristics and on the endoscopist's decision.
- EUS-GBD with lumen-apposing self-expandable metal stents (LAMSs) should be preferred to ETGBD, if performed by skilled endoscopists.
- If a EUG-GBD is performed using metal stents, we recommend their removal within 4 weeks, in order to avoid food impaction with subsequent high risk of recurrence of ACC.

Antibiotic Treatment of ACC

- In uncomplicated ACC, we recommend against the routine use of postoperative antibiotics when the focus of infection is controlled by cholecystectomy.
- In complicated ACC, we recommend prescribing the antimicrobial regimen based on the presumed pathogens involved and the risk factors for major resistance patterns.
- In patients with complicated ACC and patients at high risk for antimicrobial resistance, we recommend adapting the targeted antibiotic regimen to the results of microbiological analysis, ensuring adequate antimicrobial coverage.

REFERENCES

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