Guía Tokyo para colecistitis aguda

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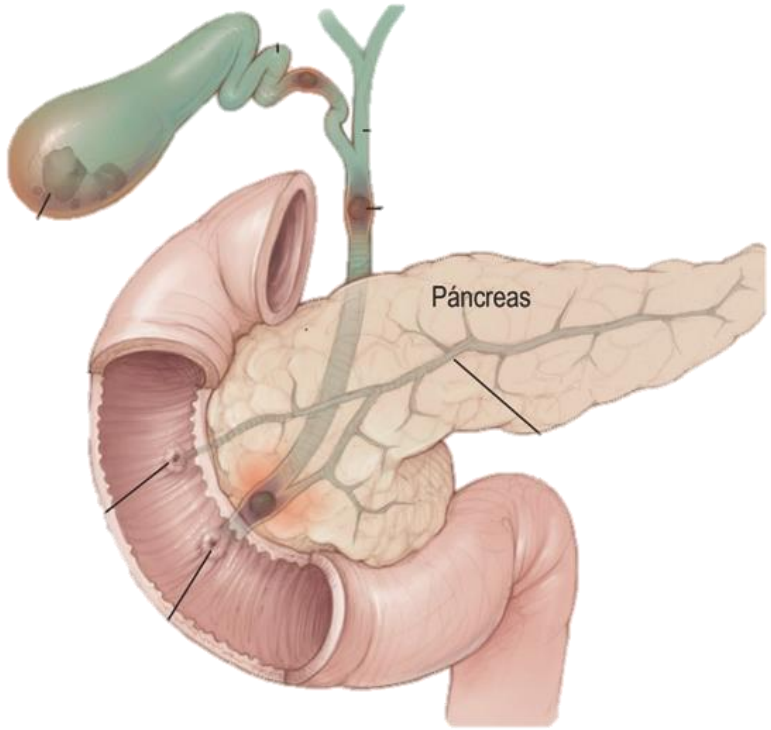
Definición

- Inflamación aguda de la vesícula biliar.

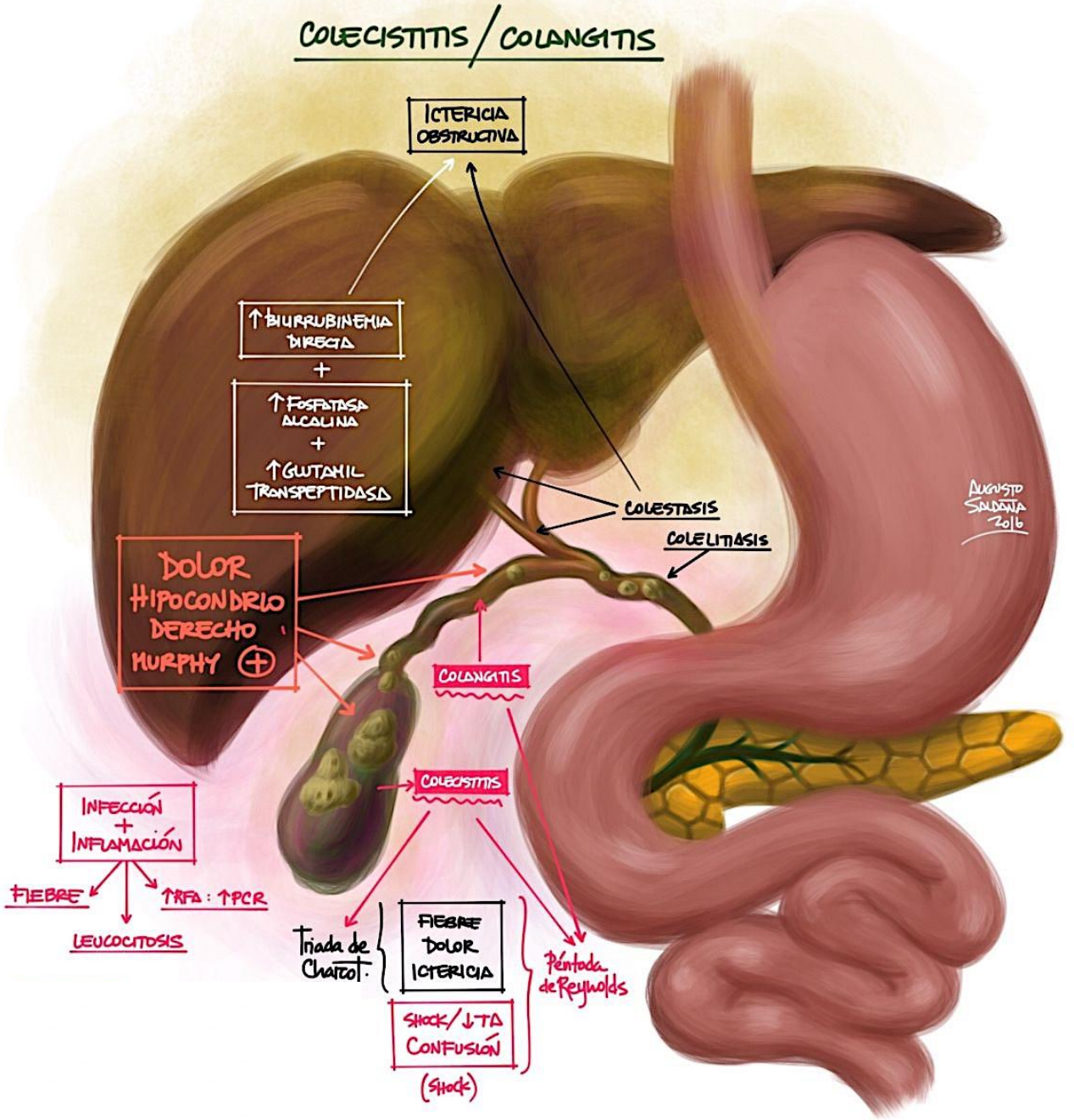


Etiología

- **Litiasis biliar 90-95%** (FR “4Fs”: forties, female, fat, fertile).
- Colecistitis alitiásica 3.7–14 % (FR: cirugía previa, traumatismo, UCI, infección, grandes quemados, nutrición parenteral)

Fisiopatología y Clínica

- Síntoma más frecuente: dolor abdominal (72-93%)
- Proporción de paciente con litiasis y clínica: 3.8-12%



Diagnóstico

Table 1 TG13 diagnostic criteria for acute cholecystitis

A. Local signs of inflammation etc.
(1) Murphy's sign, (2) RUQ mass/pain/tenderness
B. Systemic signs of inflammation etc.
(1) Fever, (2) elevated CRP, (3) elevated WBC count
C. Imaging findings
Imaging findings characteristic of acute cholecystitis
Suspected diagnosis: One item in A + one item in B
Definite diagnosis: One item in A + one item in B + C

Diagnóstico por imagen

Ecografía abdominal:

- S 50-88% y E 80-88%.
- Vesícula biliar agrandada, engrosamiento de la pared, litiasis.
- Murphy ecográfico (S 63-95% y E 93.6-95%).

- **CT abdomen**:
  - Distensión de la vesícula biliar, engrosamiento grasa perivesicular, engrosamiento de la pared, líquido libre o absceso perivesicular.

- **Gammagrafía hepatobiliar (HIDA)**:
  - S 80-90%.
  - FP 10-20% (inflamación crónica)

Criterios de severidad

Table 4 TG13 severity grading for acute cholecystitis

Grade III (severe) acute cholecystitis

Associated with dysfunction of any one of the following organs/systems:

1. Cardiovascular dysfunction	Hypotension requiring treatment with dopamine ≥5 μg/kg per min, or any dose of norepinephrine
2. Neurological dysfunction	Decreased level of consciousness
3. Respiratory dysfunction	PaO_2/FiO_2 ratio <300
4. Renal dysfunction	Oliguria, creatinine >2.0 mg/dl
5. Hepatic dysfunction	PT-INR >1.5
6. Hematological dysfunction	Platelet count <100,000/mm^3

Grade II (moderate) acute cholecystitis

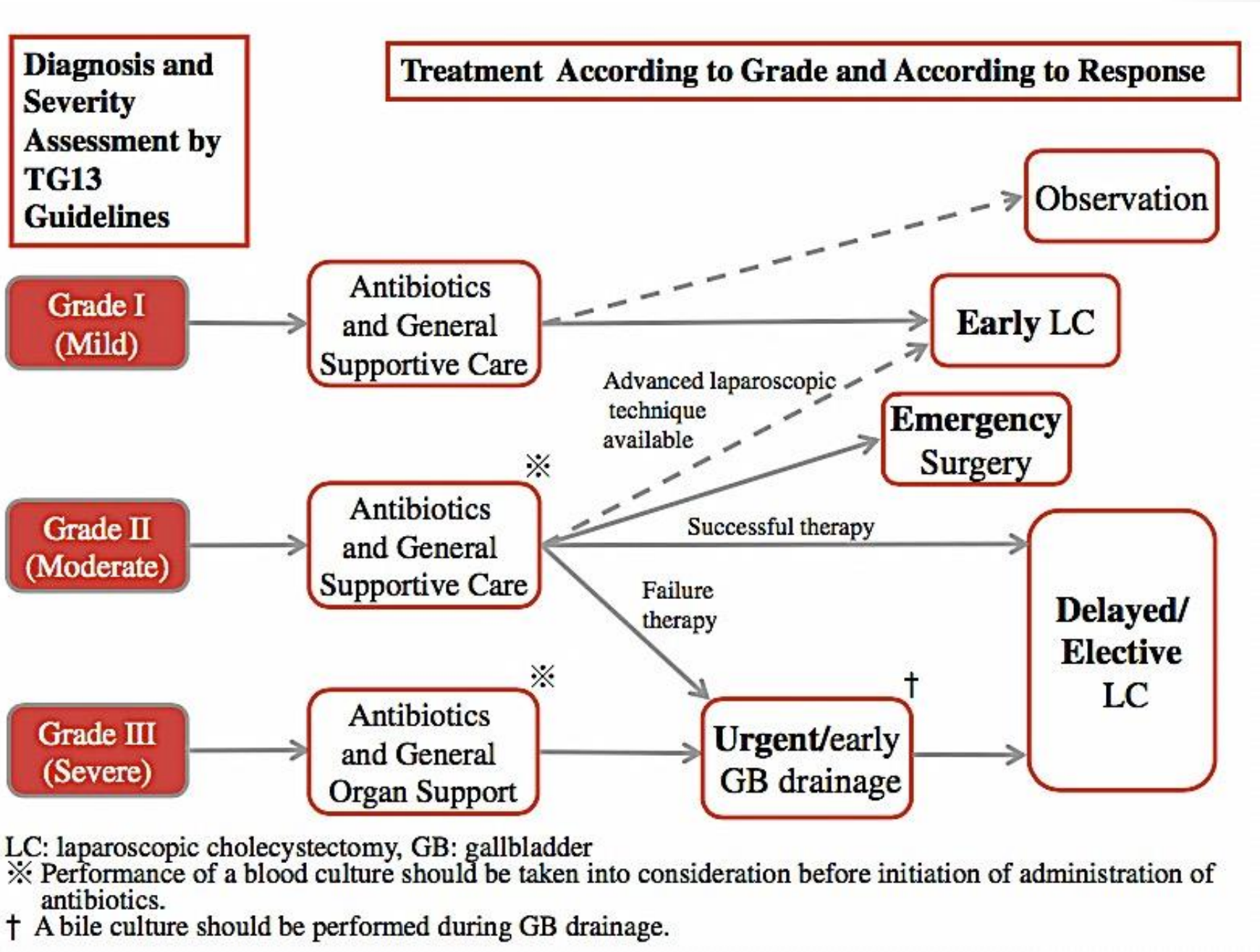
Associated with any one of the following conditions:

1. Elevated white blood cell count (>18,000/mm^3)
2. Palpable tender mass in the right upper abdominal quadrant
3. Duration of complaints >72 h
4. Marked local inflammation (gangrenous cholecystitis, pericholecystic abscess, hepatic abscess, biliary peritonitis, emphysematous cholecystitis)

Grade I (mild) acute cholecystitis

Does not meet the criteria of "Grade III" or "Grade II" acute cholecystitis. Grade I can also be defined as acute cholecystitis in a healthy patient with no organ dysfunction and mild inflammatory changes in the gallbladder, making cholecystectomy a safe and low-risk operative procedure

Manejo


Diagnosis and Severity Assessment by TG13 Guidelines
Treatment According to Grade and According to Response
Grade I (Mild)
Grade II (Moderate)
Grade III (Severe)
Antibiotics and General Supportive Care
Antibiotics and General Supportive Care
Antibiotics and General Organ Support
※
※
Observation
Early LC
Advanced laparoscopic technique available
Emergency Surgery
Successful therapy
Failure therapy
Urgent/early GB drainage
†
Delayed/ Elective LC
LC: laparoscopic cholecystectomy, GB: gallbladder
※ Performance of a blood culture should be taken into consideration before initiation of administration of antibiotics.
† A bile culture should be performed during GB drainage.

Antibioterapia

- **Microorganismos:**
  - E.coli (31-44%)
  - Klebsiella (9-20%)
  - Pseudomona (0.5-19%)
  - Enterobacter (5-9%)

  } Gram -

  - Enterococo (3-34%)
  - Estreptococo (2-20%)

  } Gram +

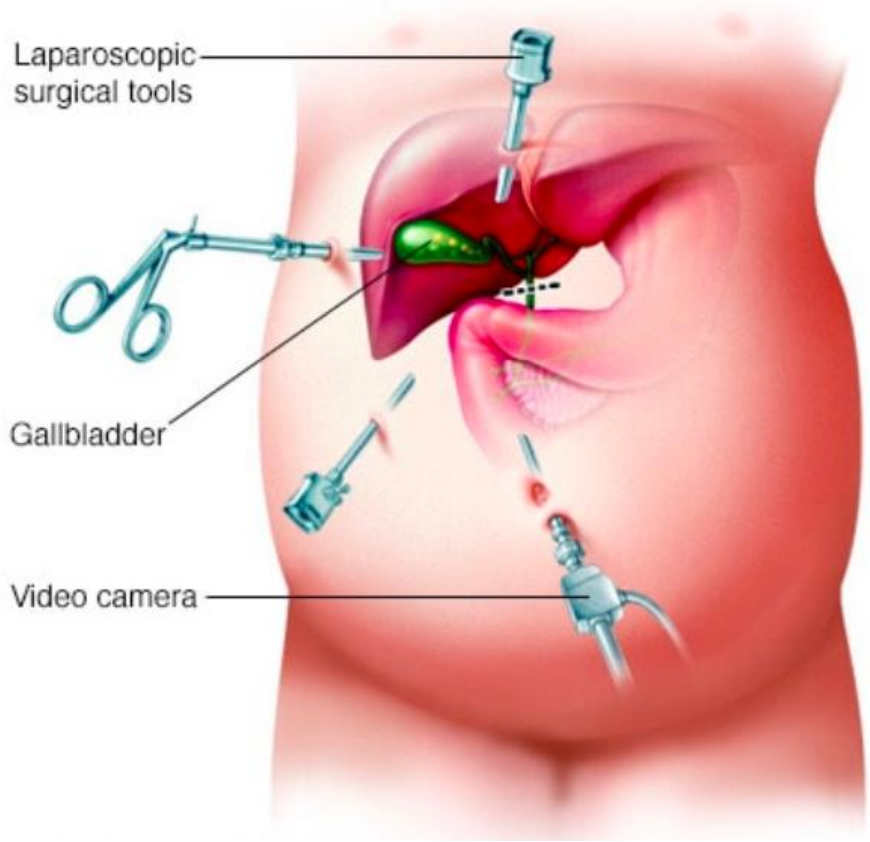
  - Anaerobios (4-20%)

- **Antibioterapia empírica Grado I:**
  - Ceftriaxona 1-2g/día p A/C 1g/8h
  - Alergia betalactamicos: aztreonam 1g/8h
  - Sospecha de BLEE: ertapenem 1g/día

- **Antibioterapia empírica Grado II-III:**
  - Piperacilina-Tazobactam 4 g/0,5 mg/6h o Ceftriaxona 1-2g/día + Metronidazol 500mg/8h
  - Alergia betalactamicos: aztreonam 1g/8h + Metronidazol 500mg/8 h
  - Sospecha de BLEE: ertapenem 1g/día

Cirugía…

¿Cuándo?



Cirugía

- Vía laparoscópica

- Según el grado de gravedad:
  - **Grado I (leve)**: colecistectomía laparoscópica temprana.

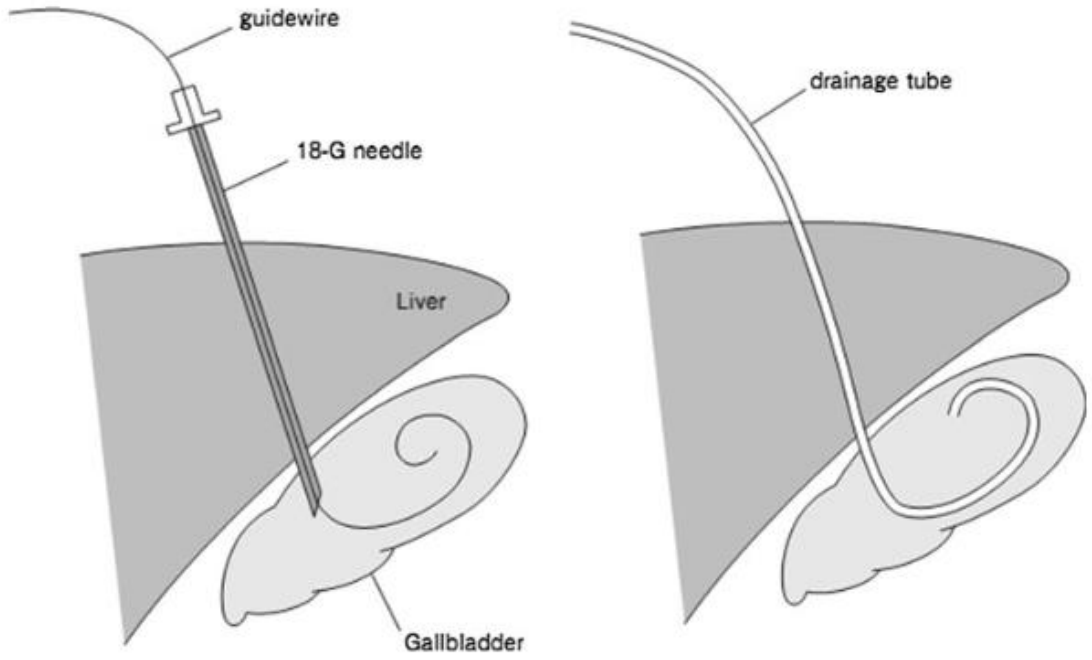
  - **Grado II (moderada)**: colecistectomía laparoscópica temprana. La inflamación local dificulta la técnica quirúrgica, pero no es una contraindicación.
    - En pacientes con complicaciones locales graves (absceso, peritonitis, colecistitis enfisematosa, purulenta o gangrenosa) la colecistectomía urgente es una indicación.

  - **Grado III (grave)**: tratamiento de la disfunción orgánica y en pacientes y drenaje de la vesícula biliar. Colecistectomía electiva tardía posterior.

- La cirugía temprana es aquella que se realiza dentro de las 72-96 h desde el inicio de los síntomas. Por otro lado, la cirugía electiva se debe realizar 6 semanas o más después del inicio.

Drenaje percutáneo

- Técnica estándar para el drenaje no quirúrgico de la vesícula biliar.
- Sencillo y disponible en todo el mundo
- Desventajas ✖
  - El drenaje no se puede extraer hasta que se forme una fístula alrededor del tubo.
  - Existe riesgo de salida del tubo de drenaje de la vesícula.
  - Incomodidad del paciente.



Bundles

Table 2 Management bundle of acute cholecystitis

1.	When acute cholecystitis is suspected, diagnostic assessment is made using TG13 diagnostic criteria every 6–12 h
2.	Abdominal US is carried out, followed by HIDA scan and CT scan if needed to make the diagnosis
3.	Severity is repeatedly assessed using severity assessment criteria; at diagnosis, within 24 h after diagnosis, and during the time zone of 24–48 h
4.	Take that cholecystectomy is performed into consideration, as soon as a diagnosis has been made, the initial treatment takes place involving the replacement of sufficient fluid after fasting, electrolyte compensation, intravenous injection of analgesics and full dose antimicrobial agents
5.	For patients with Grade I (mild), cholecystectomy at an early stage within 72 h of onset of symptoms is recommended
6.	If conservative treatment patients with Grade I (mild) is selected and no response to the initial treatment is observed within 24 h, reconsider early cholecystectomy if still within 72 h of onset of symptoms or biliary tract drainage
7.	For patients with Grade II (moderate), perform immediate biliary drainage or drainage if no early improvement (or cholecystectomy in experienced centers) along with the initial treatment
8.	For patients with Grade II (moderate) and III (severe) at high surgical risk, biliary drainage is immediately carried out
9.	Blood culture and/or bile culture is performed for Grade II (moderate) and III (severe) patients
10.	Among patients with Grade II (moderate), for those with serious local complications including biliary peritonitis, pericholecystic abscess, liver abscess or for those with gallbladder torsion, emphysematous cholecystitis, gangrenous cholecystitis, and purulent cholecystitis, emergency surgery is conducted (open or laparoscopic depending on experience) along with the general supportive care of the patient. If surgery cannot be performed due to the lack of facilities or skilled personnel, transfer of the patient is considered
11.	For patients with Grade III (severe) with jaundice and those in poor general conditions, emergency gallbladder drainage is considered with initial therapy with antibiotics and general support measures. For patients who are found to have gallbladder stones during biliary drainage, cholecystectomy is performed at after 3 month interval after the patient's general conditions are improved

US ultrasonography, *CT* computed tomography, *HIDA* hepatobiliary iminodiacetic acid

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Gracias