

Chronic hepatitis

Definition

Inflammatory disease of the liver lasting at least 6 months.

Etiology

1. Viral hepatitis
2. Autoimmune hepatitis
3. Toxic influence
4. Metabolic disorders
5. Cryptogenic (idiopathic)

Diagnosis

Symptoms – non-specific

- Weakness, fatigue, hepatosplenomegaly,

Laboratory examination

- Liver enzymes, serology, immunology, ESR, TBC (leukopenia, lymphocytosis)

Histology

- Liver biopsy → diagnosis, grading, staging

Chronic viral hepatitis

- Hepatitis – B, C, D, G, (TTV).
- History – risk factors
- Pathogenesis: damage by immune system
- Development: (acute →) chronic
- Diagnosis: serology, PCR, liver biopsy
- Histology: Grading – activity of inflammation;
Staging – degree of fibrosis.

Chronic hepatitis B

- Incubation: 30-180 days
- Transmission: blood, sexual
- Prophylaxis – immunization (anti-HBs > 100 mU/l).
- Forms: a) unapparent, b) manifest, c) fulminant
- Chronification: 5-10%
- Serological markers: HBsAg, HBsAb, HBeAg, HBeAb, HBcAg, HBcAb IgM, IgG – either Ag or Ab!
- PCR – HBV DNA – min. 10^5 copies/ml
- Negative, acute hepatitis, inactive carrier, chronic active hepatitis, seroconversion, vaccination.

Chronic hepatitis B – cont.

- Endemic regions – Asia, Africa, S Am.
- Treatment:
 - Interferon alpha - biological
 - Adefovir dipivoxil – nucleoside analogue
 - Lamivudine – nucleoside analogue
 - Entecavir – guanosine analogue
 - Telbivudine – nucleoside analogue
 - Liver transplantation
- Complications: Cirrhosis, HCC, VHD co-infection, fulminant course

Hepatitis D

- Rare – Mediterranean (Italy, Spain)
- Defect virus
- Worsening the course of VHB
- HDAg, anti-HDV, PCR

Chronic hepatitis C

- RNA virus, incubation 14-180 days
- Transmission – blood, sexual
- Chronification 50-85%
- Mostly unapparent course
- Diagnosis: anti-HCV, (recombinant immunoblot), PCR, genotyping. Liver biopsy.
- Genotypes 1-6, subtypes a,b (1b central Europe).
- No vaccination
- Treatment:
 - (Pegylated) interferon alpha
 - Ribavirin

Hepatitis G

- RNA, similar to VHC
- Often coinfection (VHB, VHC)
- Diagnosis: only PCR
- Clinical significance?
- 70% eliminated spontaneously

TTV

- Transfusion transmitted virus
- DNA
- Often coinfection (VHB, VHC)
- Clinical significance doubtful

Autoimmune hepatitis

- 70-80 % females, age 30-50 years
- Hyper-gamma-globulinemia, autoantibodies
- Type:
 - I. – ANA, ASMA, ANCA – lupoid.
 - II. - LKM1, Ila, anti HCV neg. / posit.
 - III. – SLA – rare
- Therapy:
 - Corticosteroids: Prednison
 - Azathioprin, cyclophosphamide, 6-MP
- Prognosis: 10 year survival treated 60%, untreated 23%

Cryptogenous hepatitis

- Serology, immunology negative
- Heterogenous disease
- Treatment: immunosuppressants might be effective

Chronic toxic hepatitis

- Pathogenesis:
 - a) Direct toxic influence
 - b) Idiosyncrasy
- Etiology: acetaminophen (paracetamol), methyldopa, nitrofurantoin
- Forms: hepatitic, cholestatic
- Course: spontaneous restitution

Conclusion

- Severe disease
- Serious complications
- Differential diagnosis
- Adequate treatment

Anotace

- Definition
- Etiology and pathophysiology
- Viral, autoimmune and other chronic hepatitis
- Diagnosis
- Treatment
- Complications