

OCCUPATIONAL LIVER DISEASES

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CLASSIFICATION OF OCCUPATIONAL LIVER DISEASES

- ◉ Chemically Induced Liver Disorders
- ◉ Inflammatory Liver Disorders
- ◉ Disorders Induced By Physical Agents
- ◉ Malignant Liver Diseases

Chemically Induced Liver Disorders

- ◉ Non-specific
- ◉ May be secondary important
- ◉ Chronic or Acute
- ◉ Limitation of detection
- ◉ Multiple exposure

Mechanisms of Toxicity

Category of Agent	Incidence	Experimental Reproducibility	Dose Dependent	Example
Intrinsic toxin				
Direct	High	Yes	Yes	Carbon tetrachloride
Indirect				
Cytotoxic	High	Yes	Yes	Dimethylnitrosamine
Cholestatic	High	Yes	Yes	Methylenedianiline
Host idiosyncrasy				
Hypersensitivity	Low	No	No	Phenytoin
Metabolic abnormality	Low	No	No	Isoniazid

MAJOR HUMAN HEPATOTOXINS

○ Solvents

Carbon Tetrachloride And Other chlorinated Solvent

Dimethylformamide

Toluene

Other Solvents

Mixed Solvent

Halothane And Other Anesthetic Solvents

○ Pesticides (And Related Halogenated Hydrocarbons)

○ Metals

Arsenic

Lead

EVALUATION OF LIVER DISEASE

○ Clinical History

medical history

occupational history

exposure history

○ Physical Examination

○ Laboratory Evaluation

serum marker of hepatobiliary disease

ALT-AST

AP-GGT

biochemical tests of liver function

clearance tests

test of hepatic metabolism

test of hepatic synthetic function

○ Anatomic Tests

○ Liver Biopsy

Inflammatory Liver Disorders

Agent	Occupation
Hepatitis A virus	Nursery and kindergarten staff Sewer workers
Hepatitis B and C viruses	Health care workers with blood and body fluid contact
Cytomegalovirus	Pediatric health care workers
Coxiella burnetii	Animal care workers Farm workers Slaughterhouse workers
Leptospira icterohaemorrhagiae	Sewer worker Farm workers

MEDICAL SURVEILLANCE

- Surveillance Strategies
- Screening Tests

Clinical Management Of
Abnormal Liver Function Tests

