

Evaluation of Mixed Hepatocellular and Cholestatic Disease

(ALP > 180; GGT > 50; ALT or AST > 150)

Possible causes

Further investigations

Acute hepatitis—later stages

Serology

Chronic active hepatitis

Serology

Space occupying lesion

Imaging

Cirrhosis

Alcohol AST > ALT and GGT significantly elevated

Drugs

Mixed Hepatocellular and Cholestatic pattern

Amitryptiline
Azathioprine
Carbamazepine
Ciprofloxacin
Cyclosporin
Cyproheptadine
Enalapril
Ezetimibe
Levofloxacin
Nitrofurantoin
NSAIDs
Phenytoin
Ranitidine
Sulfamethoxazole
Trazodone
Trimethoprim
Verapamil

Cholestatic pattern (typically a Cholestatic effect, but consider these also for a mixed pattern):

Amoxicillin with clavulanic acid
Anabolic steroids
Antipsychotic drugs
Azathioprine
Cefazolin
Erythromycin
Irbesartan
Mirtazapine
Oestrogens
Synthetic penicillins
Terbinafine
Tricyclics

but this list is not comprehensive

see: LiverTox: ncbi.nlm.nih.gov/books/NBK547852

Two processes (e.g. bone and liver disease)

ALP isoenzymes