



- Due to the nonspecific sonographic appearance of metastatic liver disease, ultrasound-guided biopsy is needed to determine the primary tissue diagnosis.

## Hepatoblastoma

Most common malignant liver tumor in early childhood. Third most common intra-abdominal childhood malignancy after adrenal neuroblastoma and Wilm's tumor. Most occurrences are prior to two years of age. Patient presents with an enlarging asymptomatic abdominal mass (10-12 cm at diagnosis).

- Associated genetic conditions
  - Beckwith-Wiedemann syndrome
  - Familial adenomatous polyposis
- Increased levels of serum alpha fetoprotein
- Associated lung metastases and portal vein invasion.
- Nonspecific sonographic appearance

## Laboratory Values

### ■ **Aspartate Aminotransferase (AST)**

Formerly known as serum glutamic oxaloacetic transaminase (SGOT). AST has a wide tissue distribution. It is present in the liver, heart, skeletal muscle, kidney and brain. Elevation of AST, by itself, is non-specific for liver disease. It is, however, very sensitive, being elevated in almost all significant hepatocellular diseases. An increase in AST without ALT, is seen with myocardial infarction, heart failure, muscle injury, CNS disease and other nonhepatic disorders. Serum AST and ALT are elevated to some extent in almost all liver diseases. The highest elevations occur with viral hepatitis.

### ■ **Alanine Aminotransferase (ALT)**

Formerly known as serum glutamic pyruvic transaminase (SGPT). ALT is present in high concentration within the liver tissue, therefore, ALT is more specific for liver disease than AST. Elevated AST and lactic dehydrogenase (LDH) with normal ALT rules out hepatic disease.