

Second step

Viral markers (HBsAg, HCV Ab, EBV and CMV serology)

Total IgG and IgA, auto-antibodies (ANA, SMA, LKM, LC1, tTG)

Ceruloplasmin, serum copper, 24h-urinary copper, Kaiser-Fleischer ring

Serum α 1-anti-trypsin level or phenotype

T3, T4, TSH, serum cortisol

Sweat test

Fecal elastase

Lactate, ammonemia, triglycerides

Cardiac echography

MRI of liver and biliary tree

Third step

Liver biopsy

เอกสารอ้างอิง

1. Dezsofi A, Misely AS, Liver biopsy in children 2014: who, whom, what, when, where, why? Clin Res Hepatol Gastroenterology 2014; 38(4): 395-8.
2. Iorio R, Sepe A, Giannattasio A, Cirillo F, Vegnente A. Hypertransaminasemia in childhood as marker of genetic liver disorder. J Gastroenterology 2005; 40: 820-6.
3. Lamireau T, Mclin V, Nobili V, Vajro P. A practical approach to the child with abnormal liver tests. Clin Res Hepatol Gastroenterology 2014; 38; 259-62.