

ELEVATED LIVER ENZYMES REFERRAL GUIDELINE

MAINE MEDICAL PARTNERS - PEDIATRIC SPECIALTY CARE (DIV. OF GASTROENTEROLOGY) • 887 CONGRESS ST, SUITE 300, PORTLAND, ME • (207) 662-5522

HIGH RISK

SUGGESTED EMERGENT CONSULTATION

SYMPTOMS AND LABS

Jaundice or lab evidence of cholestasis
 RUQ pain/tenderness
 Fever
 Evidence of coagulopathy

SUGGESTED PREVISIT WORKUP

Contact pediatric GI to speak to on call for urgent appointment
 The triad of jaundice, fever, and RUQ likely indicates need for urgent ED evaluation and management.

MODERATE RISK

SUGGESTED CONSULTATION OR CO-MANAGEMENT

SYMPTOMS AND LABS

Elevated ALT > 3 times normal (i.e. 80)
 OR elevated ALT < 3 times normal for 6 months
 Normal exam
 No cholestasis (i.e. no direct hyperbilirubinemia)

SUGGESTED WORKUP

Consider RUQ ultrasound
 Counsel weight loss if steatohepatitis suspected on ultrasound. Referral to Weight and Wellness recommended
 Consider serum evaluations: Acute viral Hepatitis panel, Hep C ab, TSH, TTG IgA and total IgA, CPK, and ferritin
 Suggest referral to Ped GI

LOW RISK

SUGGESTED ROUTINE CARE

SYMPTOMS AND LABS

Isolated ALT elevation < 3 times normal (i.e. 80)
 Normal exam
 No cholestasis (i.e. no direct hyperbilirubinemia)

SUGGESTED MANAGEMENT

Reassurance
 Recheck full hepatic panel (including INR, GGT) in 2 weeks for trend. If improved or trending downward, can follow for 3-4 months without initiating more extensive workup
Consider e-consultation or ECHO discussion

CLINICAL PEARLS

- Not all liver enzyme elevation reflects liver inflammation; consider muscle inflammation in your differential
- It is not unusual for liver enzymes to be elevated post virally for several months
- The primary treatment for non-alcoholic steatohepatitis is weight loss and exercise. If steatosis is noted on ultrasound and BMI is elevated, get them started on a weight loss program!
- Isolated elevation in AST is rarely of concern. Elevation in ALT is more specific to liver inflammation
- The above applies from birth through age 18.

Maine Medical
PARTNERS

These clinical practice guidelines describe generally recommended evidence-based interventions for the evaluation, diagnosis and treatment of specific diseases or conditions. The guidelines are: (i) not considered to be entirely inclusive or exclusive of all methods of reasonable care that can obtain or produce the same results, and are not a statement of the standard of medical care; (ii) based on information available at the time and may not reflect the most current evidenced-based literature available at subsequent times; and (iii) not intended to substitute for the independent professional judgment of the responsible clinician(s). No set of guidelines can address the individual variation among patients or their unique needs, nor the combination of resources available to a particular community, provider or healthcare professional. Deviations from clinical practice guidelines thus may be appropriate based upon the specific patient circumstances.