

¹³C Glycocholic Acid Breath Test

RELEVANCE:

Studying enterohepatic circulation of bile acids, bacterial overgrowth in jejunum, bile acid loss by impaired ileic function

SUBSTRATE / TEST MEAL:

Oral dose of 4 mg per kg body mass [1,2-¹³C₂]glycocholate, dissolved in water and supplemented by toast and butter

STATUS OF PATIENT: After overnight fast

TIMING OF SAMPLE COLLECTION:

Immediately before and then at 30 minute intervals for 6 hours after tracer intake

EVALUATION:

The test is pathological if the 6-h cumulative ¹³CO₂ excretion is higher than 3% of the administered label. A low ¹³CO₂ excretion, however, does not discriminate between normals and patients with massive faecal bile acid loss. Faecal ¹³C excretion should therefore be measured simultaneously.

REFERENCES:

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