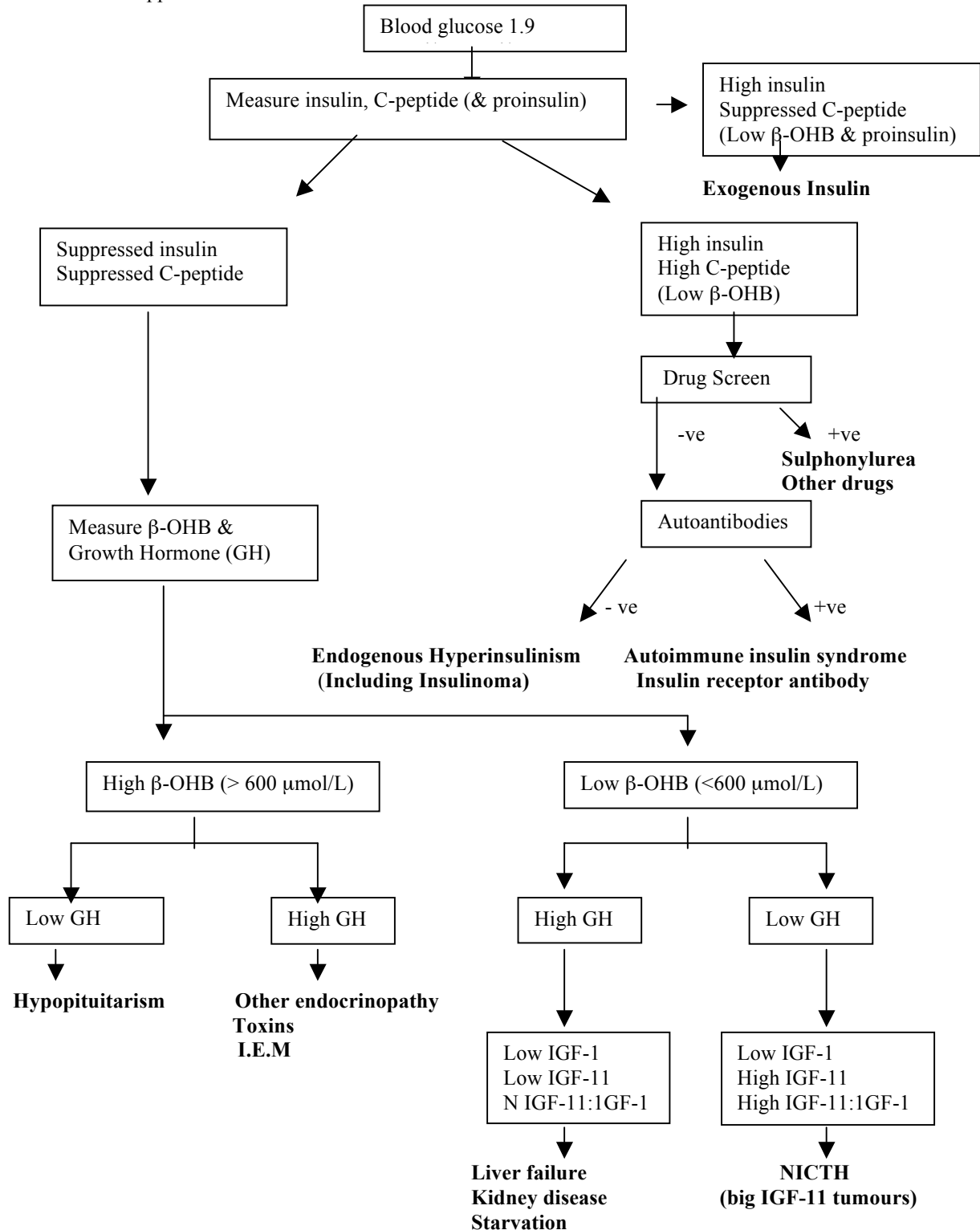


A 51-year-old woman arrives in AE with a grand mal fit. Her capillary blood glucose using a glucose meter is 1.5mmol/L. Venous blood samples are collected into fluoride oxalate, lithium heparin and serum gel tubes following which she is resuscitated with intravenous glucose. The patient does not have diabetes mellitus. The laboratory plasma glucose is 1.9mmol/L. Describe or produce an algorithm of the laboratory investigations you would perform on the surplus blood specimens collected during hypoglycaemia to elucidate the cause of her hypoglycaemia.

Satisfies Whipple's triad



Potential Pitfalls:

Immunoassay values are assay dependent

Immunoassay Interferences

Use of specific insulin assays – do not detect proinsulin/ synthetic insulins

Renal impairment and C-peptide