# LABORATORY ENDOCRINE TESTING: HYPOGLYCEMIA Summary of the Clinical Practice Guideline | January 2008

#### **OBJECTIVE**

Alberta clinicians optimize laboratory tests for investigation of suspected hypoglycemia

#### **TARGET POPULATION**

Patients exhibiting clinical features of hypoglycemia

#### **EXCLUSIONS**

None

# RECOMMENDATIONS

✓ Test serum glucose and look for clinical features. Hypoglycemia is defined as a serum glucose < 2.5 mmol/L with concurrent clinical features (see Table 1)

### Clinical Features of Hypoglycemia

- Andrenergic excess:
  - Sweating
  - Palpitations
  - Anxiety
  - o Tremor
- Neuroglycopenic (e.g., altered consciousness and seizures, behavioral changes)

## Table 1: Clinical Features of Hypglycemia

- ✓ Provide oral glucose this should rapidly reverse symptoms
- ✓ Measure simultaneous fasting serum insulin and glucose, i.e., occurring > five hours after a meal
- ✓ Refer patients with fasting hypoglycemia to endocrinologists
- X Do not use capillary reagent strip testing to diagnose hypoglycemia
- ✓ Consider gastrointestinal (GI) motility problems with post prandial hypoglycemia (< five hours after a meal)
  - Post-prandial hypoglycemia is usually not associated with any serious disorders but may be associated with GI motility problems
- ✓ If hypoglycemia is confirmed, specialist referral is indicated for further testing.

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