**DIABETES REMISSION AT A GLANCE**

- Diabetic remission is achieved when insulin is no longer required to maintain normoglycemia.
- Other interventions (eg, diet) may still be used for blood glucose control.
- Likelihood of remission is highest in cats with newly diagnosed diabetes that receive intensive, early treatment.
- Some diabetic cats may alternate periods of overt diabetes with remission.
- Distinguishing diabetic remission from well-controlled diabetes may be difficult via history and clinical examination.
- Unless concurrent disease is present, well-controlled cats and cats in diabetic remission should not show signs typical of diabetes (eg, polydipsia, polyuria, weight loss).

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**DIABETIC REMISSION IN CATS**

**DIABETIC CAT ON INSULIN THERAPY**

**INVESTIGATION**

Educate about goals of treating diabetes; possibility of achieving remission with intensive, early treatment; and signs of remission.

**INVESTIGATION**

Client education

**INVESTIGATION**

Signs of hypoglycemia (eg, lethargy, odd behavior, weakness, ataxia, hypersalivation, vomiting, dilated pupils, seizure, coma)?

**INVESTIGATION**

Assess compliance

**INVESTIGATION**

Insulin overdose?

**HYPOGLYCEMIA OCCURRED AFTER PRESCRIBED INSULIN DOSE WAS GIVEN; NO OTHER CAUSE FOR HYPOGLYCEMIA IDENTIFIED**

**INVESTIGATION**

Insulin overdose?

**YES**

TREATMENT

Discontinue insulin

**NO**

**INVESTIGATION**

Subclinical hypoglycemia

**GLYCEMIA WITHIN RANGE**

**DIAGNOSIS**

Diabetic remission

**DIAGNOSIS**

Well-regulated diabetes

**PER SISTENT HYPERGLYCEMIA**

**INVESTIGATION**

Review history and signs; perform glucose curve assessment ± laboratory assessment (eg, fructosamine level)

**YES**

**RESULTS**

Remission unlikely

**NO**

**TREATMENT**

Discontinue insulin

**DIAGNOSIS**

Remission unlikely

**SUBCLINICAL HYPOGLYCEMIA**

**DIAGNOSIS**

Remission unlikely
PROPER INSULIN DOSE AND NO CAUSE FOR HYPOGLYCEMIA IDENTIFIED.

DIAGNOSIS
Remission likely

INVESTIGATION
After discontinuation of insulin, findings suggestive of diabetic remission:
- Euglycemia over most of the day.
- Hyperglycemia, if it occurs, is mild and typically does not exceed renal threshold (~250 mg/dL).
- When cat is not hypoglycemic, glucose concentration often remains in the low euglycemic range.
- Urine may test negative for glucose.

INVESTIGATION
Hypoglycemia (either clinical or subclinical) detected on glucose curve.
- Hyperglycemia occurs after pharmacologic doses of insulin.
- When cat is not hypoglycemic, glucose concentration often remains in the low euglycemic range.
- Urine may test negative for glucose.

INVESTIGATION
Findings suggestive of diabetic remission:
- Euglycemia most of the day.
- Hyperglycemia, if it occurs, is mild and typically does not exceed renal threshold (~250 mg/dL).
- Glucose concentration is usually in the low euglycemic range most of the day.
- Urine may test negative for glucose.

INVESTIGATION
Findings suggestive of well-controlled diabetes:
- Hyperglycemia present at least part of the day.
- Hyperglycemia may approach or exceed the renal threshold (~250 mg/dL).
- Euglycemic periods followed by periods of hyperglycemia, suggesting need for insulin.
- Urine is usually positive for glucose, although it is present in low amounts.

RESULTS
Remission unlikely

INVESTIGATION
Monitor as for typical diabetes patient
- Diabetic cats in remission should be considered as having diabetes that does not require insulin for control.
- Cats with a history of insulin-requiring diabetes should be monitored by owners for recurrence of signs consistent with diabetes and evaluated by a veterinarian at least every 3 months.
- Return of signs does occur in some cats previously in remission, and insulin therapy may need to be reinstituted.