



Diagnosis

Diabetes mellitus is not always a straightforward diagnosis. It requires a thorough assessment of clinical signs, individual history, and laboratory results. In the early stages of disease, cats may present with vague signs such as “seems a little off” or “less interactive lately.” Stress hyperglycemia can further complicate or delay diagnosis.

Client Concerns and History

- Weight loss (or owner's perception that a diet is *finally* working)
- Drinking more water
- Drinking from unusual places
- Begging for food/insatiable appetite
- Decreased ability to jump
- Lethargy
- Urine is sticky or difficult to clean
- More frequent urination, larger urine clumps, or urination out of the box

Supportive Clinical Findings

- Polyuria (PU), Polydipsia (PD), Polyphagia (PP)
- Weight loss
- Hyperglycemia and glucosuria; +/- ketonuria
- Plantigrade stance
- DM cats that are weak, depressed, anorexic, vomiting, collapsed, or moribund may have diabetic ketoacidosis (DKA) and require emergency care. (*Refer to ISFM Guidelines on Diabetes Mellitus, page 246*)

Diagnostics

- Minimum database: CBC, chemistry with electrolytes, Total T₄, UA, FeLV/FIV Status
- Additional tests as appropriate to help confirm diagnosis: Fructosamine and fPL
- Additional tests as appropriate to fully assess the patient: blood pressure, UPC ratio, urine culture; also consider cobalamin and folate concentrations, thoracic radiographs, abdominal ultrasound

Complicated Diabetics

The following are comorbidities that may complicate diabetic regulation:

- Chronic Kidney Disease (CKD)
- Obesity
- Urinary Tract Infection (UTI)
- Dental disease
- Exposure to human hormone creams
- Conditions where steroids are a common component of management
- Acromegaly
- Hyperadrenocorticism

Diabetes Mellitus Diagnosis

A diagnosis of DM requires documentation of hyperglycemia (BG >250 mg/dl {13.8 mmol/L}) and concurrent glucosuria, plus one or more of the following pieces of supportive evidence:

- A history of PU/PD/PP and ketonuria
- An increased serum fructosamine concentration
- An increased glycated hemoglobin % (HgA1c)
- Documentation of hyperglycemia in the home environment (BG >250 mg/dl) 24 hours after a hospital visit
- Documentation of glucosuria in the home environment 24 hours after a hospital visit