

TROUBLESHOOTING DIABETIC DOGS AND CATS RECEIVING THE "UPPER RANGE"¹ OF INSULIN DOSES



²CORRECT HANDLING OF INSULIN

1. Using proper syringe
2. Storing in fridge
3. Shaking vs. rolling as appropriate, depending on type of insulin
4. Appropriate injection technique
5. Replacing with a new bottle if the current insulin is expired, discolored, cloudy, or flocculent

¹UPPER RANGE = highest dose typically used in uncomplicated diabetes, achieved after stepwise dose increases

Dog: 1–1.5 U/kg*

Cat: 5 U/cat*

*author opinion

³CONCURRENT MEDICATIONS THAT CAN CAUSE INSULIN RESISTANCE

1. Oral or topical steroids (including otic, ophthalmic, and cutaneous preparations)
2. Progestins (including exposure to owners' skin creams)
3. Cyclosporine

⁴COMMON PHYSICAL EXAM FINDINGS NOTED IN DIABETICS WHO ARE DIFFICULT TO REGULATE

1. Severe dental disease
2. Intact female
3. Obesity
3. Pot-bellied appearance, panting, bilateral symmetrical alopecia

³BASELINE DIAGNOSTICS

- CBC, chemistry with electrolytes
- U/A, culture, UPC
- Blood pressure
- T4 in cats
- Triglycerides in susceptible dog breeds

? Is the insulin being handled and administered correctly?²

✓ Yes

✗ No

? Are any concurrent medications that can cause insulin resistance being administered?³

✓ Yes

✗ No

✋ Correct the problem

📖 Refer to "Monitoring Algorithm"

? Can the medications be discontinued safely within 2–4 weeks?

✓ Yes

? Not sure

✗ No

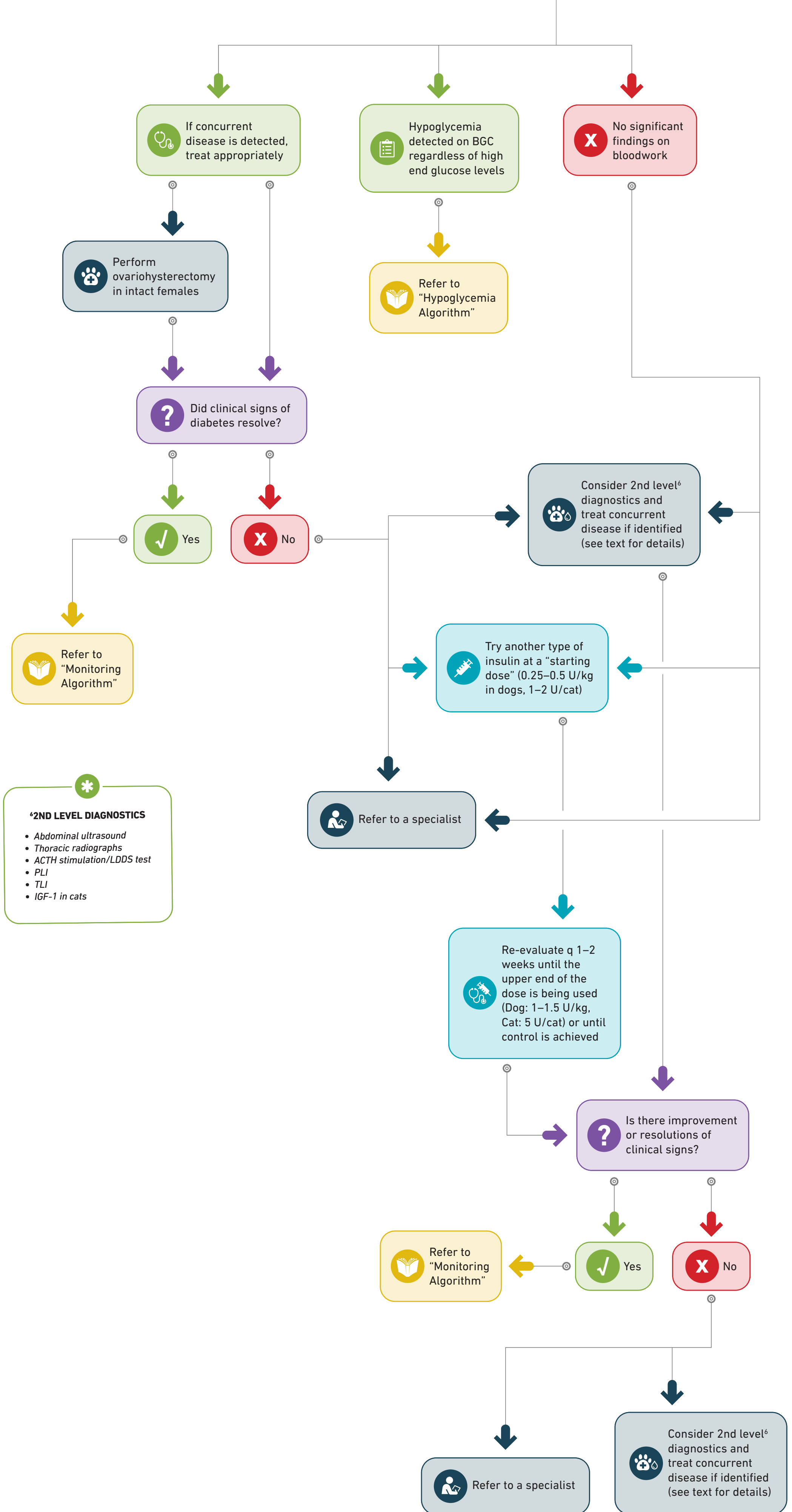
✗ Discontinue medications and re-evaluate in 2 weeks

👤 Consult with a specialist

💉 Increase insulin dose by 10% or ½ unit/patient (whichever is greater) then adjust based on BGC and clinical signs

📖 Refer to "Monitoring Algorithm"

🩺 Perform PE,⁴ baseline diagnostics⁵ and BGC (if they have not already been done)



- * 2ND LEVEL DIAGNOSTICS**
- Abdominal ultrasound
 - Thoracic radiographs
 - ACTH stimulation/LDDS test
 - PLI
 - TLI
 - IGF-1 in cats