A Stain in the Neck

The most commonly used cytological stain in small animal practice is a modified Romanowsky stain. Multiple specimens are typically dipped directly in the solutions, which might result in contamination in organic material and bacteria. There are anecdotal reports of bacterial contamination of tissues, especially with *Pseudomonas aeruginosa*, which could lead to misdiagnoses. This study evaluated whether or not *P. aeruginosa* could contaminate tissues and, if so, the feasibility and visibility of the organism. *P. aeruginosa* was inoculated into clean fixative, eosin, and methylene blue. Stock broth solution was used as a positive control and sodium hypochlorite as a negative control. Viable bacteria and methylene blue were found to be detectable by microscopical examination.

**COMMENTARY**

Cytology hygiene is critical in a point-of-care laboratory. Simple steps will improve specimen quality. To prevent streaking and stain artifact, change the stains and their containers weekly and use distilled water. In my practice, we use urine collection cups as containers. If glass jars are used, clean them thoroughly. Change the rinse water daily. Cover the stains so dust and debris cannot accumulate. Gently blot the slide on tissue paper between stains to minimize carryover. Allow slides to dry thoroughly before evaluating. Heat fixation is not necessary. To prevent bacterial contamination, this study encourages using fixative, avoiding introduction of large amounts of gross debris into the stains, changing stains frequently, and using clean jars disinfected with alcohol. If unexpected findings are encountered, check the stain. With acetate tape preparations, skip the fixative step because this will dissolve the adhesive and may fog the specimen.—Karen A. Morrillo, DVM, DACVD

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**Source**


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**vetsulin (porcine insulin zinc suspension)**

NADA 141-224, Approved by FDA

**CAUTION**

Federal law restricts this drug to use by or on the order of a licensed veterinarian.

**INDICATION**

vetsulin® (porcine insulin zinc suspension) is indicated for the reduction of hyperglycemia and hyperglycemia-associated clinical signs in dogs and cats with diabetes mellitus.

**CONTRAINDICATIONS**

Dogs and cats known to have a systemic allergy to pork or pork products should not be treated with vetsulin®. vetsulin® is contraindicated during periods of hypoglycemia.

**WARNINGS**

User Safety: for use in animals only. Keep out of the reach of children. AVOID contact with eyes. In case of contact, immediately flush eyes with copious amounts of water for 15 minutes. Accidental injection may cause clinical hypoglycemia. In case of accidental injection, seek medical attention immediately. Excess insulin product may induce a local or systemic allergic reaction in sensitized individuals.

Animal Safety: Owners should be advised to observe for signs of hypoglycemia (see Owner Information Sheet). Use of the product was reviewed as established dosages were associated with hypoglycemia. An animal with signs of hypoglycemia should be treated immediately. Glucose should be given orally if available. If the animal is hypoglycemic and exhibits signs of hypoglycemia, it should be administered to the patient. A change in blood glucose results in changes in insulin sensitivity. Gradually change the dose of insulin as needed.

**APPROPRIATE PROTOCOLS**

Appropriate diagnostic tests should be performed to rule out endocrinopathies (rare congenital defects in the insulin receptor, and defects in insulin receptor signaling). In rare cases, inappropriate glucose regulation can have an antagonistic effect on insulin activity. In these situations, glucose should be administered to the animal.