

We believe that there was likely a deviation from adequate veterinary care provisions, primarily because a more thorough physical examination could have led to a correct diagnosis. The fluid therapy, while helpful, should not have been started until after consultation with the investigator, given that it was not an emergency. Additional options for managing the case should have been discussed with the investigator as well.

What action might the USDA take if an inspector read about the incident? This is difficult to say as we are not certain what level of detail was maintained in the medical records for this case. Records should include all diagnostic test results, documentation of treatment, identification of all medical and physical problems, the length of the problem, physical examination results by body system, the proposed plan of action for medical and physical problems, weight, and information from the visual examination. It is possible the USDA inspector could seek additional information on the physical examination performed and the timing relative to initiation of treatment.

1. Animal Welfare Act regulations. CFR 9, Chapter 1, Subchapter A, Part 2, Subpart C.
2. Public Health Service. *Policy on Humane Care and Use of Laboratory Animals* (US Department of Health and Human Services, Washington, DC, 1986; amended 2002).
3. Institute for Laboratory Animal Research. *Guide for the Care and Use of Laboratory Animals* 8th edn. (National Academies Press, Washington, DC, 2011).

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RESPONSE

A case for clearer communication

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The *Guide for the Care and Use of Laboratory Animals* states, “Recurrent or significant problems involving experimental animal health should be communicated to the IACUC and all treatment and outcomes

should be documented”¹, thus the veterinarian should report this incident to the IACUC. Clearly this scenario represents a “significant problem” that might result in the researcher requesting additional animals or might represent an underlying management concern with respect to the diet (ideally high fiber, low carbohydrate) or how health issues are communicated to the veterinary staff. Either way, the IACUC is charged with “ongoing assessment of animal care and use,” which should include regular communication with the veterinarian and the IACUC regarding adverse or unexpected events that affect animals, regardless of whether they are related to the experiment or not. At our institution, we regularly prepare a veterinary report that is shared at the IACUC meeting. This serves to keep members informed about the types of clinical concerns that can arise from experimental or management issues, and keeps the IACUC abreast of trends within the animal care program and issues that result in requests for additional animal use. It also allows for transparency within the program.

Although we might have managed this case differently, we do not feel that this represents a deviation from the concept of adequate veterinary care^{1,2}. This rabbit was quickly diagnosed and treated by the veterinarian based on the findings at the time and the treatment plan that was discussed with the investigator. In hindsight, more aggressive medical management of this case—oral rehydration, administration of lubricants, nutritional support and analgesics—or a more thorough examination under sedation or anesthesia before performing surgery might have yielded a better outcome. However, we feel that the veterinarian acted in accordance with the standard of veterinary care. The *Guide for the Care and Use of Laboratory Animals* states, “If a disease or infectious agent is identified in a facility or colony the choice of therapy should be made by the veterinarian in consultation with the investigator. If the animal is to remain in the study the selected treatment plan should be sound and when possible interfere minimally with the research process”¹. Without knowing the type of study for which this rabbit was used, it is difficult to assess why the data was not salvageable. The outcome of this case was unfortunate, but we do not believe there was any wrongdoing. However, this case does highlight the need for regular

and clear communication between the veterinarian and the investigator regarding diagnosis, treatment options and prognosis, and communication of the outcomes between the veterinarian and the IACUC.

Assuming the clinical care and treatment were appropriately documented in the animal’s record, the USDA inspector should have no concerns when reviewing the record of this incident.

1. Institute for Laboratory Animal Research. *Guide for the Care and Use of Laboratory Animals* 8th edn. (National Academies Press, Washington, DC, 2011).
2. Animal Welfare regulations. CFR 9, Chapter 1, Subpart A.

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RESPONSE

The art of veterinary medicine

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Provision of adequate veterinary care is an essential element of all animal care programs. Regulatory and practice standards require provisions for appropriate and competent clinical, preventive and emergency veterinary care¹⁻⁴. An in-depth knowledge of species-specific behavior, anatomy and physiology is critical to assessing the well-being of an animal and conducting proper physical examinations.

Dental disease is one of the most common reasons for presentation of a rabbit to a surgeon⁵. This is because it is difficult to adequately examine the dentition of cheek teeth owing to the rabbit’s large tongue, skin folds in the diastema, limited range of mandibular opening and prominent incisors. Clear visibility is achieved only when rabbits are under general anesthesia. Rabbit teeth are classified as aradicular hypsodont, with 28 permanent teeth that grow continuously. Growth is balanced by dental abrasion from chewing and fiber in the diet. Typically, the buccal surface wears away more quickly than lingual aspects. The most common finding that accompanies elongated cheek teeth is the formation of spurs on the lingual occlusal surface of the mandibular cheek