**Anesthetic effect of dexmedetomidine-ketamine-midazolam combination administered intramuscularly to zoo-housed naked mole-rats (heterocephalus glaber).** *Journal of Zoo and Wildlife Medicine* 51.1 (2020): 59-66. Huckins, Gail L., Eshar, David, Shrader, Trent, and Beaufrère, Hugues.

Which genus of rodentia should generally not be anesthetized with protocols extrapolated from other mammals of similar size due to their unique low basal metabolism and high Hgb with increased oxygen affinity?

1. *Cavia porcellus*
2. *Cynomys ludovicianus*
3. *Sciurus carolinensis*
4. *Chinchilla lanigera*
5. *Heterocephalus glaber*

Answer E - naked mole rats

**Anesthetic effects of alfaxalone-ketamine-midazolam and alfaxalone-ketamine-dexmedetomidine administered intramuscularly in black-tailed prairie dogs (Cynomys ludovicianus)**. *American Journal of Veterinary Research* 83.9 (2022). Kara Hiebert, David Eshar, Jasmine Sarvi, Hugues Beaufrère.

**QUESTION:** *general prairie dog anesthesia question (Quesenberry chapter)*

What metabolic changes do you expect to be caused from anesthesia in prairie dogs?

1. Respiratory acidosis and azotemia
2. Hyperlactatemia and hyperkalemia
3. Metabolic alkalosis and hypoglycemia
4. Hyperglycemia and hypercapnia
5. Azotemia and hyperthermia

Answer: A - Additionally, body position under gas anesthesia does not have significant effects on biochem/acid-base parameters

[**Retrospective analysis of risk factors, clinical features, and prognostic indicators for urolithiasis in guinea pigs: 158 cases (2009-2019)**](https://doi.org/10.2460/javma.21.09.0421)

**Practice Question:** Which of the following is true regarding Guinea pig urolithiasis?

1. Urolith formation is associated with water bowls
2. Surgical intervention can result in shorter survival
3. Young male guinea pigs are overrepresented
4. Males have a shorter survival time than females
5. Anorexia and weight loss did not affect survival

**Answer:** D

[**Comparison of subcutaneous sedation with alfaxalone or alfaxalone-midazolam in pet guinea pigs (*Cavia porcellus*) of three different age groups**](https://doi.org/10.2460/javma.21.02.0104)

**Practice Question:** Which of the following is true regarding sedation of Guinea pigs with alfaxalone?

1. Causes no change in respiratory rate
2. Causes no change in heart rate
3. Causes no change in body temperature
4. Causes no change in post-anesthetic fecal output
5. Causes no sedation even at high doses

Answer: D

**Removal Of Pseudo-Odontomas Via Lateral Maxillotomy In Three Richardson's Ground Squirrels (*Urocitellus richardsonii*)**

Takami Y, Une Y

*JZWM* 2022 53(3):600-604

A Richardson’s ground squirrel (*Urocitellus richardsonii*) presents with dyspnea but no oculonasal discharge and CT shows a mass at the apex of the maxillary incisor. Name two differentials and the treatment of choice.

Answer: Pseudo-odontoma (dysplastic) and elodontoma (neoplastic) - surgical removal (can do lateral maxillotomy, described in this species and prairie dogs).

**FIELD ANESTHESIA OF FREE-RANGING NUTRIAS (MYOCASTOR COYPUS) FOR SURGICAL REPRODUCTION CONTROL**

Degerfeld V, Mauthe M, Serpieri M, Banchi P, Quaranta G.

Journal of Wildlife Diseases, 2021;57(3):495–502

In free-ranging nutria (*Myocastor coypus*) in Italy which of the following possibly resulted in an adverse anesthetic outcome?

1. Fast induction time
2. Bradycardia following induction
3. Supplemental isoflurane
4. Atipamezole reversal
5. Slow recovery

Answer: D

A pharmacokinetic study evaluating the use of hydromorphone in guinea pigs (Cavia porcellus) found which of the following?

1. Guinea pigs given hydromorphone IV were significantly more sedate compared to IM administration
2. IM administration reached target plasma concentrations but IV did not
3. A small number of animals experience moderate ileus after hydromorphone administration
4. Hydromorphone appears to be more sedating than buprenorphine in guinea pigs
5. Hydromorphone has high bioavailability when administered IM in guinea pigs

Answer: E

Surgical abdominal insufflation with carbon dioxide (CO2) in guinea pigs results in which of the following side effects?

1. Elevated fecal cortisol
2. Decreased fecal output
3. Elevated blood glucose
4. Decreased coprophagy
5. Decreased rectal temperature

Answer: D

1. What was the most common infectious diagnosis found in Ontario rodents and lagomorphs?
   1. Gastroenteritis
   2. Encephalitis
   3. Cystitis
   4. Colitis
   5. Dermatitis

Answer is B: Encephalitis with 90% of these cases consistent with neural larval migrans

1. Which month is considered to have a lower prognostic indicator when considering the presentation of wild orphaned juvenile Eastern Gray Squirrels to a wildlife rehabilitation center?
   1. April
   2. June
   3. August
   4. October
   5. November

Answer: A. April those with increased mortality rate presented between December and May