Cervical Dislocation of Rodents

Objective:
Describes the process of euthanasia by a method of rapidly dislocating the spinal cord from the brain stem.

Introduction:
Cervical dislocation is a technique used in physical euthanasia by applying pressure to the neck and dislocating the spinal column from the skull or brain. It requires skill and training. The AVMA report recommends that cervical dislocation be used only for poultry and mice or rats weighing less than 200 grams. When consistent with the experimental protocol, animals should be sedated or lightly anesthetized prior to cervical dislocation. The Attending Veterinarian must certify that any individual performing this procedure on conscious animals is trained appropriately.

Technique:
1. Restrain the rodent in a normal standing position on a firm flat surface and grasp the tail with one hand at the base.
2. Place a rod shaped instrument or the thumb and first finger of the other hand against the back of the neck at the base of the skull.
3. To produce dislocation, quickly push forward and down with the hand holding the instrument or with the fingers in proper location.
4. The effectiveness of the dislocation can be verified by separation of the cervical vertebrae. When the spinal cord is severed, a 2-4mm space will be palpable between the skull and the cervical vertebrae.
5. Check closely to confirm respiratory arrest and when possible, verify by palpation that there is no heartbeat.

NOTE: Performing the procedure on a surface that the animal can grip will make it easier to gain access to the base of the skull because rodents often stretch themselves forward when held by the tail.