

# Procedure for Removal of the Brain Stem

Several instruments may be used to remove the brain stem, as depicted in photo below.



A modified long-handled spoon with the sides ground down and the end sharpened slightly is wider than a spatula or a grapefruit knife and thus seems to remove the brain stem with the least amount of trauma.

## ID Requirements – History Form

- Record breed, sex, age, and color of animal.
- Owner/location of animal
- Any and all metal, plastic, or owner's tags, tattoo's (ocv), brands etc. (All tags should be removed and saved in plastic bag if animal is going to be disposed of by owner)



USDA tags are applied by the rendering truck drivers at the time of pickup, if animal is to be sampled at the plant.

**Step 1** – Remove the head from the animal at the atlanto-occipital joint. Have the head extended to sever the brain stem as far posterior as possible during the removal process.

**Step 2** – Once the head has been removed, position the head ventral side up (this allows a better angle for removing the brain stem). Trim the fibrous sheath around the brain stem and cut the cranial nerve trunks free from the brain stem (4:00 and 8:00 positions). A small utility knife or messenbaum scissors may be used. (See Photo #1.)

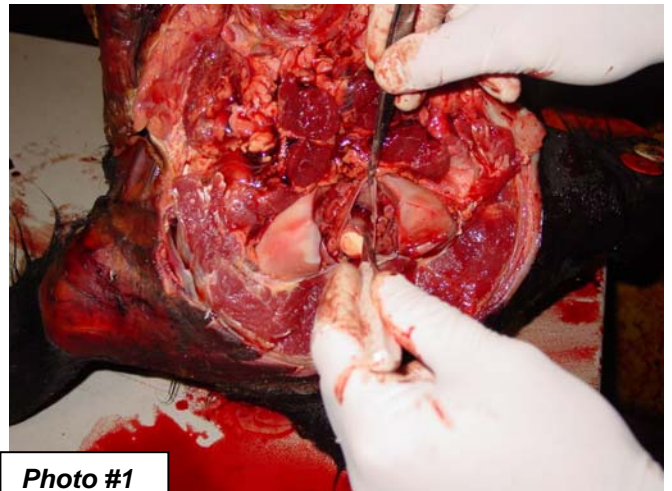
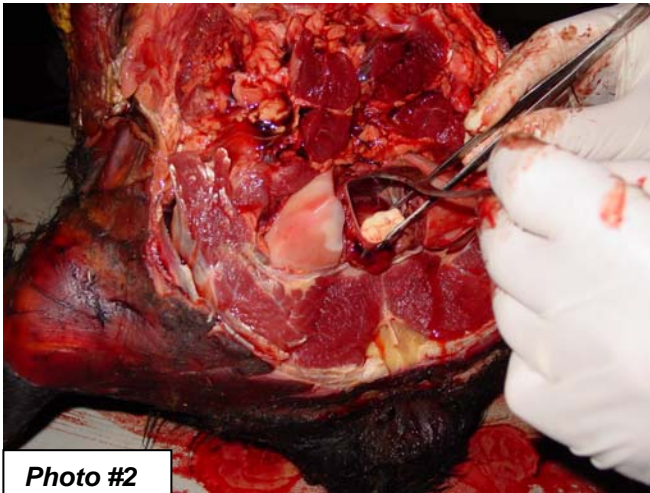


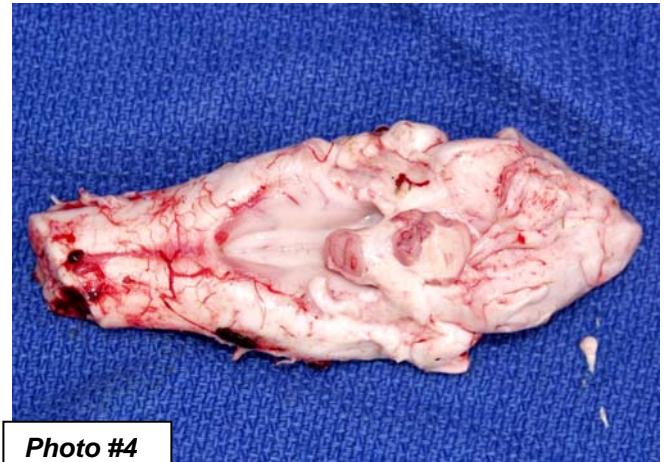
Photo #1

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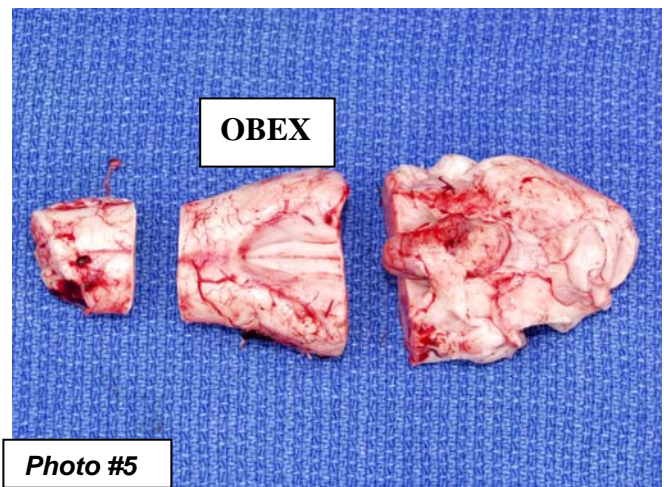
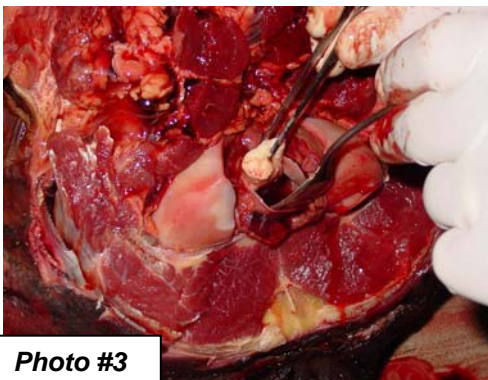
**Step 3** – Insert the modified spoon between the brain stem and the ventral floor (remember the head is positioned upside down) to sufficient depth to ensure the obex area of the brain stem is preserved with the brain stem. Be sure to keep the handle of the spoon down so you are scrapping the ventral floor as you separate the brain stem ventrally. (See Photo #2.)



**Step 5** – The obex can be identified on the dorsal aspect of the brainstem by its “V” shape. Section the brain stem by making a lateral cut  $\frac{3}{4}$  inch forward and behind the obex. Place the center portion containing the obex in a container of 10% formalin. Place the remaining brainstem portions in a whirl-pac (Zip Lock) bag and freeze. (See Photos # 4 and 5.)



**Step 4** – Insert the modified spoon between the brain stem and the cerebellum, again to a sufficient depth to ensure the obex area of the brain stem is preserved with the brain stem. Be sure to keep the handle of the spoon up this time so you are scrapping the dorsal roof, separating the cerebellum from the brain stem. In a scooping motion and gentle tension with a forceps, the brain stem can be removed. (See Photo #3.)



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