Cranial capping technique

Equipment required

1. A hard hat, particularly if working in an abattoir or knackery
2. Safety eye glasses, particularly if using hammers and axes
3. Strong gloves to protect against sharp bone fragments
4. Overalls
5. Rubber boots (gumboots)
6. One meat saw
7. One sharp boning knife
8. One plastic 2 litre jar with a secure screw top lid half filled with 10% buffered formalin for the brain
9. One small axe or mallet
10. Sharpening steel or a screwdriver or similar tool for levering apart head once cut
11. One smaller jar to hold the unfixed spinal cord sample which will be sent off to the appropriate laboratory for permanent storage
12. Knee pads to make working in the kneeling position cleaner and more comfortable (optional)
13. A piece of carpet to serve as a good working surface for this technique (optional).

Step-by-step instructions to perform the cranial capping technique

1. Using a saw, make one cut on each side of the head and cut through the occipital condyles (bony knobs which join with the first vertebra and are located at the back of the skull). These cuts on the sides of the head should not go too deep to avoid damaging the brain stem.
2. Using a saw, cut across the front of the head halfway between the eye and the horn bud. The side cuts and this cut across the front of the head should now connect.
3. When all the cuts have been made, make some sharp blows to the poll area with an axe or mallet to break the cap free and allow it to be pulled off.
4. Lever it apart with a sharpening steel or a screwdriver (or similar tool).
5. Using a knife, cut away the dura mater (the thin sheath covering the brain) and the tentorium cerebelli (an extension of the dura mater which separates the cerebrum from the cerebellum).
6. Roll the brain out and sever the nerve attachments and pituitary stalk.
7. Collect a 2-3 cm length of spinal cord and place in the smaller plastic screw top jar. **Freeze this sample.**
8. Make a gentle knife cut between the cerebral hemispheres to expose the ventricles so the formalin can enter inside the brain for better fixation.
9. Place the brain into the jar of 10% buffered formalin nose first so the brain stem does not fix in a distorted position. **Do not freeze**.
10. Submit the spinal cord, the fixed brain and any other specimens to the accredited laboratory in your state or territory, where they will be permanently stored.