

Brief Communication

**A PRACTICAL METHOD OF TAKING BLOOD SAMPLES
FROM THE PIG**

Several methods of taking a blood sample from the pig are described in the literature. *V. cava cranialis* (Kowalczyk *et al.* 1951) and *V. jugularis externa* (Hütten & Preuss 1953) are practical veins for blood sampling from pigs of different sizes. The animals are usually laid supine and the sample taken by needle and syringe or by vacuum tube. Madsen (1977) and Benjaminsen & Karlberg (1979) have described a method whereby they take the sample with a vacuum tube from the external jugular vein, with the animal standing.

The ear veins are often mentioned as the only superficial veins for blood sampling and for intravenous injections in the pig, but the veins vary individually in size; furthermore, fixation may excite the animal so that the peripheral circulation is minimized.

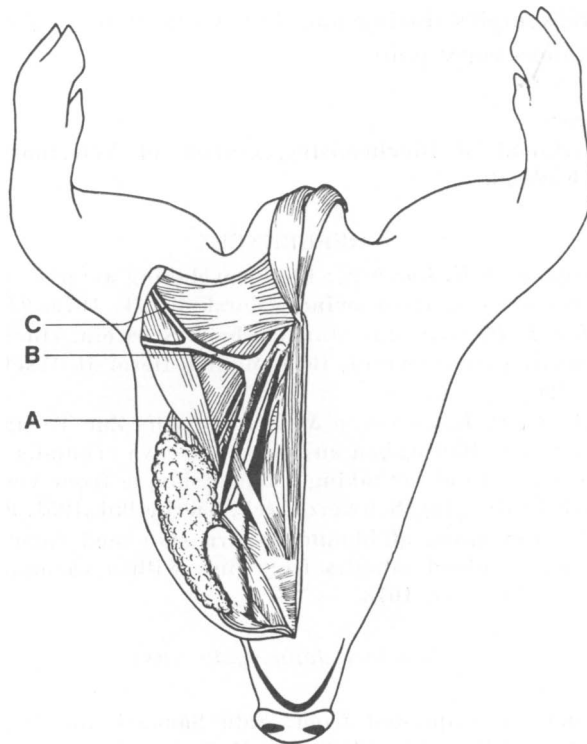


Figure 1. Dissection of the cervical region in the pig. A *V. jugularis externa*; B *V. cephalica*; C *V. cephalica accessoria*.

The author has successfully used *V. cephalica* for blood sampling from pigs. *V. cephalica* lies subcutaneously on *M. brachiocephalicus* and drains the blood from the forelimbs and joins the external jugular vein. The pig is laid supine with the forelimb stretched backwards and a little outward from the body. The cephalic vein can then easily be seen when slightly pressed with the finger (Fig. 1). Using vacuum tubes and 20 or 21 gauge needles, 10 ml of blood or even more can be obtained almost as quickly as from the jugular vein. The vein can be sampled even from piglets only a few days old, but it has mainly been used on pigs weighing from 20 to 50 kg. The necessity of turning the pigs on their backs limits the use of the method with heavier animals.

This method of blood sampling can be used without any risk of losing e.g. a valuable experimental animal. When the blood sample is taken from *V. cava cranialis* or *V. jugularis externa* the needle may easily damage *N. phrenicus* or cause serious bleeding by severing arteries, especially when the animal is not adequately fixed. *V. cephalica* can also be punctured for several successive samples during one day, without fear of causing the animal unnecessary pain.

Satu Sankari

The Department of Biochemistry, College of Veterinary Medicine, Helsinki, Finland.

REFERENCES

- Benjaminsen, E. & K. Karlberg*: Blodprøvetaking av gris. (Blood specimen collection from swine). Norsk Vet.-T. 1979, 91, 15—17.
- Hütten, H. & F. Preuss*: Blutentnahme beim Schwein. (Blood specimen collection from swine). Berl. Münch. tierärztl. Wschr. 1953, 66, 89—90.
- Kowalczyk, T., D. K. Sorensen & H. R. Glättli*: Zur Technik der Entnahme von Blutproben aus der Vena cava cranialis des Schweines. (A method for taking a blood sample from Vena cava cranialis in the pig). Schweiz. Arch. Tierheilkd. 1951, 93, 628—632.
- Madsen, P.*: Udtagning af blodprøver fra svin med vacutainer. (Collection of blood samples from pigs with a vacutainer). Dansk Vet.-T. 1977, 60, 1073.

(Received January 12, 1983).

Reprints may be requested from: Satu Sankari, the Department of Biochemistry, College of Veterinary Medicine, Box 6, SF-00551 Helsinki, Finland.