

SOP No: AHT 44

SUBJECT: Saphenous Vein Puncture of Laboratory Rodents.

POLICY: Operator must be experienced and competent in this technique.
This technique should only be attempted once fortnightly although serial samples of smaller quantities can be taken by removing the scab.

PRECAUTIONS: Gloves, eye protection, long-sleeved gown, closed in shoes

EQUIPMENT: 70% Alcohol
No 11 Scalpel blade
Swabs
Heat lamp
Smallest gauge needle appropriate for the species (e.g. 25G in mice).
Collection tube

PROCEDURE:

1. Warm animals by placing cage under a heat lamp for 10-15 mins. **DO NOT LEAVE UNATTENDED.**
2. Restrain animal using preferred holding style or sedate with sedative of choice (specify dose rate, route of injection and volume.)
3. Shave the dorso/lateral area of the ankle joint using the scalpel in the direction of the hairs.
4. Swab vein with 70% alcohol
5. Gently "insert" the needle into the vein and allow the blood to flow into the tube as it forms at the puncture site. Blood flow is aided by occluding the vein with the thumb.
6. Expect to recover around 0.5% of BW as a single sample (every 14 days) or 0.05% for more frequent (daily) collections by this method.
7. Apply gentle pressure with the swab for 1-2 min to encourage clotting.

RECOMMENDATIONS:

DATE ISSUED:

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REFERENCES

1. Helm A, Smith A.J. and Solberg P. Saphenous vein puncture for blood sampling of the mouse, rat, hamster, gerbil, guineapig, ferret and mink. *Lab Animals* (1998) 32, 364-368.
2. Wolfensohn S. and Lloyd M. (1994). *Handbook of Laboratory Animal Management and Welfare*. Oxford: Oxford University Press.