SOP No:

AHT 55b

**SUBJECT:** 

Intravenous (jugular) placement in the cat using a

modified Seldinger technique

**REASON FOR USE:** 

This technique allows the operator to serial sample

blood from the cat while minimising the stress

associated with repeated restraint and needle insertion.

**POLICY:** 

This procedure may only be performed by operators skilled

in the technique.

Surgery must be performed under aseptic conditions

PRECAUTIONS:

Surgical gloves, surgical cap and mask, surgical gown,

closed-in shoes.

All instruments and materials (including catheter) must be

sterilised before use.

Surgery must be performed under aseptic conditions.

**EQUIPMENT:** 

Intravenous jugular catheter (with Seldinger kit: introducing

catheter, guide wire and dilator)

Sterile surgical kit (including drapes, No 15 scalpel blade)
2 Tuta minimum volume extension sets (25cm) and attached

10ml syringe with heparinised-saline solution

(1U/ml)

Luer lock injection port

Suture material; and 22g needle

Short acting anesthetic

Injectable cephalexin solution

Elastoplast, vet wrap and gauze bandages

## **PROCEDURE:**

- 1. Anaesthetise cat (specify dose, route and volume)
- 2. Clip the area over the jugular vein
- 3. Aseptically prepare the area around the right or left jugular vein.
- 4. Make a small incision of approximately 1 cm in length in the skin.
- 5. Localise the jugular vein and a 22 gauge IV peripheral catheter is inserted into the vein towards the heart.
- 6. Pass the flexible guide wire through the IV catheter.
- 7. Remove the catheter over the guide wire.
- 8. Pass a small dilator over the guide wire and then remove.
- 9. Use the guide wire to direct the central venous catheter into the vessel. Once the catheter is in place, the guide wire is removed.
- 10. Leave the central venous catheter in place and secure with 2 skin sutures.

11. Apply a light bandage around the neck, flush the catheter twice daily with 3mL of 0.9% saline solution and lock with 1mL of heparinised saline solution at a concentration of 10 IU/mL, until removal.

Change the bandages daily and inspect the catheter site.

**RECOMMENDATIONS:** 

**DATE ISSUED:** 

28.04.2010

**REVISED:** 

21.08.2013

REFERENCES

1. Martin GJW, Rand JS (1999) Evaluation of polyurethane jugular catheter in cats placed using a modified Seldinger technique. *Aust Vet Journal*, 77:13-17.