



SOP for Treatment of Pets

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Document Approval

<p>Prepared by: National Veterinary Hospital</p> <p>Signature</p> <p>Designation..... Veterinary officer National Animal Hospital Department of Livestock Ministry of Agriculture & Forest Thimphu Bhutan</p> <p>Date</p>	<p>Reviewed by: Review Committee</p> <p>Signature</p> <p>Designation..... Veterinary Officer Animal Health Division Department of Livestock Ministry of Agriculture & Forests Thimphu : Bhutan</p> <p>Authorized by: Department of Livestock</p> <p>Signature</p> <p>Designation..... Director General Department of Livestock Ministry of Agriculture & Forests Thimphu : Bhutan</p>
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Revision History

Revision	Revision Date	Reason for Revision	Revised by

Prepared by NVH	Reviewed by Review Committee	Authorized by DoL
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1. Purpose

1.1 This SOP describes the procedure for carrying out treatment.

2. Scope

2.1 This SOP covers the procedures for restraining and administering medicine to animals.


3. Responsibilities

Sl. No.	Official Designation	Responsibilities
1.	Veterinarians/Para-veterinarians	Administering the medications as prescribed.
2.	Animal attendants	Assist the para-veterinarians with restraining of the animal and clean the table and room after every operation

4. Definitions

- 4.1 **AHD:** It refers to Animal Health Division under the Department of Livestock.
- 4.2 **Animal attendants:** It refers to a person who helps in restraining of animals and ensures the well being of the animals during the treatment procedures.
- 4.3 **Body temperature:** It refers to the degree or intensity of heat present in the body.
- 4.4 **Capillary refill time (CRT):** It reflects perfusion of peripheral tissues. Press on an area of mucous membrane. The gums will "blanch" white as they are pressed and become pink again when pressure is released. Normal: < 2 seconds.
- 4.5 **Case Register:** It refers to a register or database wherein the details of owners and patients are recorded.
- 4.6 **Case Registration number:** It is the number assigned for particular patient during case registration.
- 4.7 **Consultation:** It refers to the process of examination of patients and discussing with the owner about the patient.
- 4.8 **DoL:** It refers to Department of Livestock.

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4.9 **DRA:** It refers to Drug Regulatory Authority.

4.10 **Effective Date:** It is the date that a document becomes effective for use.

4.11 **Muzzle:** It refers to a device used to cover the animal's snout.

4.12 **NVH:** It refers to National Veterinary Hospital, Thimphu.

4.13 **New case:** It refers to the sick animal brought to the hospital for the first time.

4.14 **Para-veterinarian:** It refers to a person with diploma in Animal Science and is authorized to provide treatment to the animals.

4.15 **Pet:** It refers to dogs and cats.

4.16 **Physiological Parameters:** It refers to the measurement of normal functions of living organisms and their parts.

4.17 **Prescription Form:** It refers to a form with details of the patient with instruction written by the veterinarians/para-veterinarian that authorized patient to be issued with a medicine or treatment.

4.18 **Restrain:** It refers to application of any procedure designed to restrict its movements in order to facilitate examination of patient.

4.19 **Repeat case:** It refers to the sick animal undergoing follow up treatment.

4.20 **SOP:** It refers to Standard Operating Procedure.

4.21 **Tentative Diagnosis:** It refers to provisional or unconfirmed diagnosis.

4.22 **Veterinarian:** It refers to a person holding a bachelors degree in Veterinary Science and Animal Husbandry and is authorized to practice veterinary medicine.

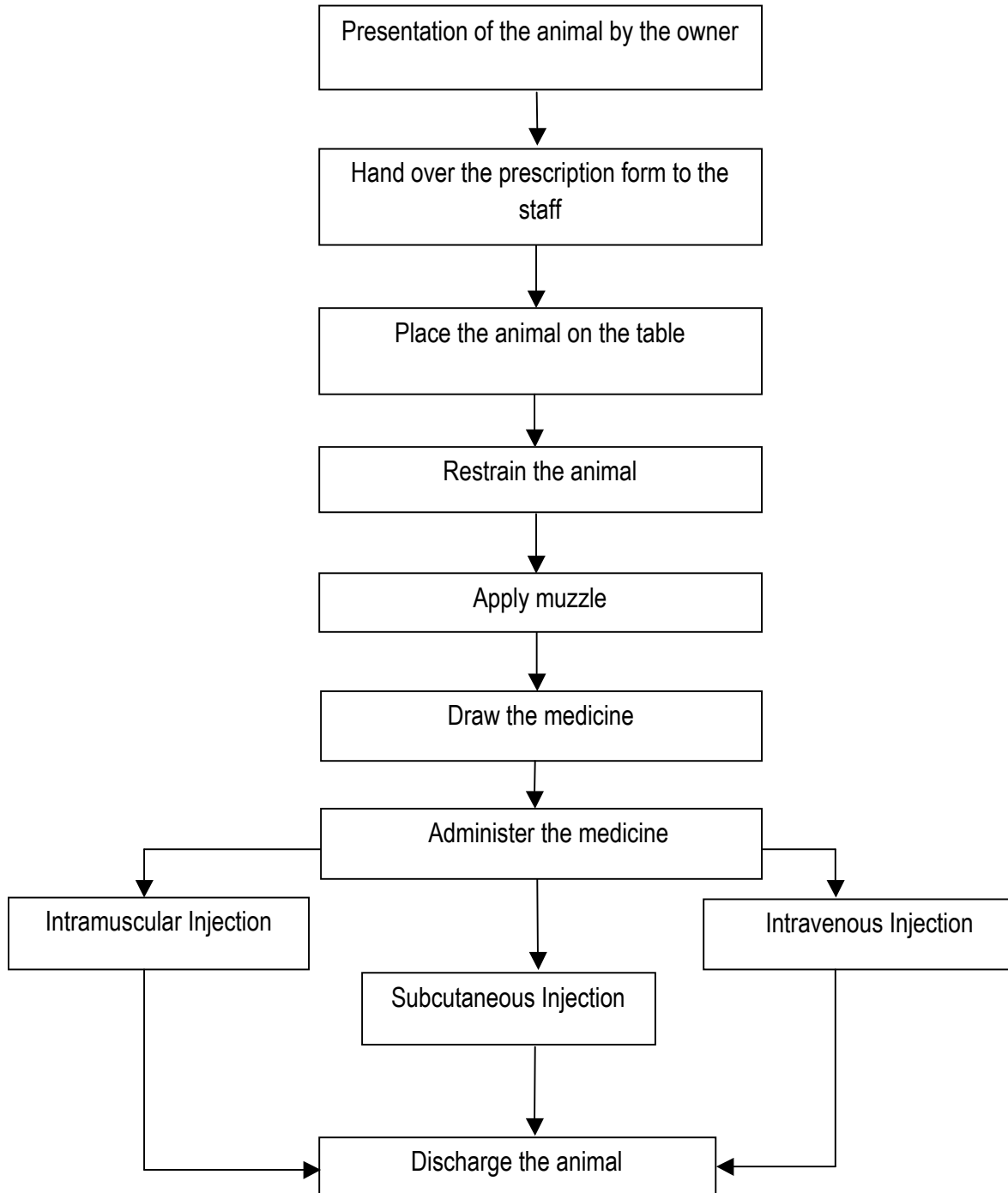
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5. Process Map in Flow Chart



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6. Procedure

6.1 Treatment room/area

- 6.1.1 It should be clean at all times.
- 6.1.2 It should be well lighted with good ventilation or air conditioning.
- 6.1.3 There should be treatment table(s) of appropriate size with a top made of either stainless steel, aluminum or porcelain.
- 6.1.4 There should be IV stands for fluid administration.
- 6.1.5 It shall have a properly installed and functional sink with a permanent piping for water supply and drainage.
- 6.1.6 It shall have a refrigerator and cabinet or shelves for medicines, instruments and others.
- 6.1.7 The technical staff should wear clinical dress (blue) or white lab coat (properly buttoned) with nametag.

6.2 Present the patient by the owner.

6.3 Handover the prescription to the paraveterinarian/nurse.

6.4 Place the patient on the table.

6.5 Restrain the animal.

- 6.5.1 Apply muzzle or a loop made at the centre of the bandage using a surgeon's knot is slipped over the nose half way up to the corner of the mouth and is drawn tight. The ends of the bandage are brought around the sides of the neck to tie it near the pole.

6.6 For intramuscular injection.

- 6.6.1 Using a 2ml or 5ml syringe with 20-22G needle, insert the needle into the vial.
- 6.6.2 Pull back the plunger slowly to draw the desired amount of medicine.
- 6.6.3 Put the cap on the needle and place it in a kidney tray.
- 6.6.4 Part the fur to expose the skin at the intended site of injection.
- 6.6.5 Wipe the skin with cotton dipped in spirit.
- 6.6.6 Chose the site for intramuscular injection.

6.6.6.1 The different sites for intramuscular injection are quadriceps (muscle on the front of thigh), lumbodorsal muscles (muscles on either side of lumbar spine), the triceps (behind humerus) or the hamstrings (muscle at the back of thigh). The hamstrings muscle should generally be avoided due to the possibility of damage to the sciatic nerve. The volumes for injection should not be more than 6ml.

6.6.6.2 The triceps muscle is located caudal to the humerus. Left thumb is placed on the humerus, isolating the muscle belly in the left hand. The needle is placed in the muscle belly.

6.6.6.3 The quadriceps is located anterior to the femur. The left thumb is on the femur. The needle is inserted at a right angle to the muscle belly.

6.6.6.4 The dorsal lumbar muscles are on the either side of the midline. With the left thumb feel the lumbar vertebrae and give injection away from them.

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6.6.6.5 When administering injection into the semimembranosus/semitendinosus (hamstrings) muscle group, the tip of the needle should be directed toward the caudal aspect of the limb. Use left hand to isolate the muscle group caudal to the femur.

6.6.7 Before injecting the medicine, withdraw the plunger.

6.6.8 If blood is aspirated, pull out, refill the syringe with fresh medicine and insert again.

6.6.9 If no blood is aspirated, give the injection, withdraw the needle and massage the muscle.

6.6.10 Dispose the syringe and needle separately as per the SOP for Disposal of Pharmaceutical and Biological Wastes.

6.7 For subcutaneous injection

6.7.1 Lift the skin up and form a pocket with your finger on neck/chest.

6.7.2 Press the needle into the skin.

6.7.3 If blood is aspirated, pull out, refill the syringe with fresh medicine and insert again.

6.7.4 If no blood is aspirated, give the injection, withdraw the needle and massage the muscle.

6.7.5 Dispose the syringe and needle separately as per the SOP for disposal of waste.

6.8 For intravenous injection

6.8.1 Restrain the animal.

6.8.1.1 Apply muzzle.

6.8.1.2 The owner will hold the animal's head by passing his arm under the neck and the assistant will hold the limbs steady and put the pressure on the vein so that it stands out **OR**

6.8.1.3 Apply a tourniquet over the limb to raise the vein.

6.8.2 Choose the site for intravenous injection.

6.8.2.1 The sites for venipuncture are cephalic veins (front of front legs), lateral saphenous veins (outside lower rear legs), medial saphenous veins (inside upper rear legs) for cats and jugular veins.

6.8.3 Clip the hairs or shave the area.

6.8.4 Hold below elbow (cephalic vein) and above knee (saphenous vein).

6.8.5 Use thumb to roll cephalic vein outside.

6.8.6 Wipe the site with cotton dipped in spirit.

6.8.7 Using IV canula


6.8.7.1 Use IV canula size 24G (yellow) for cats & small pups, 22G (blue) for average sized dog and 20G (pink) for larger dogs.

6.8.7.2 Insert the tip of the needle into the vein and when blood begins to flow into the hub of the catheter, advance the catheter forward over the needle into the vein.

6.8.7.3 Remove the needle and connect the canula to the IV fluid.

6.8.7.4 Apply plaster over the wing of the canula around the limb of the animal to

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<p>secure the canula.</p> <p>6.8.7.5 Once the IV fluid administration is completed, disconnect the IV fluid and close the canula with the cap.</p> <p>6.8.7.6 Apply bandage over the canula.</p> <p>6.8.7.7 In follow up treatments, remove the bandage and flush the canula with 5ml of Normal saline/RL to check the patency and restart as above.</p> <p>6.8.8 Using butter fly scalp vein set</p> <p>6.8.8.1 Use size 24G (red) for cats & small pups, 22G (black) for average sized dog and 20G (yellow) for larger dogs.</p> <p>6.8.8.2 Insert the needle into the vein and when blood begins to flow into the tubing, connect it to IV administration set.</p> <p>6.8.8.3 Apply plaster over the wing of the scalp vein set around the limb of the animal to secure it.</p> <p>6.8.8.4 Once the IV administration is completed, dispose the set after removing the needle from the vein and apply pressure on the vein with cotton to arrest bleeding.</p> <p>6.8.9 The rate of administration</p> <p>6.8.9.1 The rate of administration should be parallel to the severity of dehydration.</p> <p>6.8.9.2 Administer 13-14ml/kg body wt/hour until urine flow is restored.</p> <p>6.8.9.3 Decrease the rate at 10ml/kg body weight/hour.</p> <p>6.8.10 Discharge the patient.</p> <p>6.8.11 Dispose the syringe and needle separately as per the SOP for Disposal of Pharmaceutical and Biological waste.</p> <p>6.8.12 Clean the table with the disinfectant.</p> <p>7. Related Forms or Work Instructions</p> <p>7.1 Prescription form</p> <p>7.2 SOP for Cleaning and Disinfection.</p> <p>7.3 SOP for Disposal of Pharmaceutical and Biological waste.</p> <p>8. References</p> <p>2.2 SOP on SOP format – Drug Regulatory Authority, Thimphu.</p> <p>2.3 Standard Operating Procedure for anesthesia in dog – McGill.</p> <p>2.4 Veterinary Surgical techniques-restraining of animal – Amresh Kumar.</p>
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