Design –it-yourself your applied professional approaches

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Professional veterinary medicine, especially is large animal practice, may be difficult, time consuming and frustrating. Veterinarians always seek procedures to mitigate the hardship of dealing with therapeutic management of large animals. Lots of procedures has been innovated by keen veterinarians that now are widely accepted in veterinary practice. Briefly, some approaches will be discussed here that would be able to facilitate the veterinary practice and save time and money for the practicing veterinarian.

1. What's your opinion about urinary system? Lots of credit-hours have been devoted to teach diseases of the kidneys, ureters, urinary bladder and urethra. However, what can one do without a urinary catheter while confronting a suspected case suffering from a disease of urinary system? Or how can I evacuate the urinary bladder of a colicky horse or foal unable to urinate, while the organ is fully distended? Or a cow with uterine prolapsed with concurrent urinary bladder distention?

Human nasogastric (NG) tube can be easily used successfully as a urinary catheter in all the above situations. Neonatal NG tube also can be used in neonatal foals as well. In cases of suspected urethral calculi, human NG tubes can be used to locate the site of obstruction.

2. What's your opinion with neonatal dairy calves with respiratory distress? For example a dairy calf born after a delayed parturition following a difficult dystocia? Using sodium bicarbonate injectable solutions is advised in cases of acidosis, provided respiratory system performance isn't deteriorated, otherwise, the situation will be complicated.

An oxygen capsule is highly beneficial in these cases. However, handling a heavy oxygen capsule is too difficult and frustrating. Carbide welding is prevalent even in far districts and villages. The capsule contains oxygen can be used either by a flow-meter regulator with humidifier or under a tent. In the later, please humidify the oxygen before entering the tent.

3. What's your opinion with intravenous infusion of large amounts of fluids to dairy cattle, while large bore infusion set is not available or the needle should be kept constantly?

Large bore infusion sets have been marketed recently. However, a urinary set with an adaptor can serve as a large bore infusion set. A long needle (10-12 cm) if appropriately inserted into the jugular vein remains open and merely needs timely replacements of bottles of fluid and electrolyte therapy.

4. What's your opinion with a neonatal dairy calf with diarrhea? After rapid infusion of initial fluids and electrolytes what can you do with the maintenance fluid therapy?

If the suckle reflex of the calf is revived, then a human NG tube can be inserted into one of nostrils and conducted to the esophagus. Now, the farmer is be able to timely instillation of electrolyte containing solutions as well as milk through the tube, which is fixed to the

muzzle, by an adhesive tape commonly used to isolate electric wires. Otherwise, a butter fly set can be fixed into the aural vein of the calf to have a continuous drip to the calf.
Human NG tube also can be used during feeding colostrums to newborn calves, when unable to suckle by themselves as well.

5. What's your opinion with caustic drugs that potentially cause thrombophlebitis, especially in horses, during intravenous injections?

Intravenous injection of some drugs, e.g. tetracyclines, flunixin meglumine, and xylazine may cause thrombophlebitis during drug injections, due to caustic nature of the drugs. Moreover, safe injection of these drugs should be warranted. Inadvertent Intracarotid injection of xylazine to horses has serious consequences, as the horse may fall backwards.
Don't throw away the cap of intravenous catheters! Put a sterile needle into the bottle of drugs and never withdraw it. Put the cap on the top of the needle. Withdraw the amount of drug form the bottle with an appropriate syringe and detach it from the needle of the bottle. Put another sterile needle into the vein and be careful for the color of blood and whether it emerges in a pulsatile or smooth manner. Then, attach the syringe to the inserted needle, inject it carefully, and detach the syringe from the needle. Let the needle remain in the vein until several drops of blood washes the inside of the needle. Now you can withdraw the needle from the vein safely.

6. What's your opinion during injection of fluids during cold weather? How do you warm up solutions, e.g. calcium containing bottles for treatment of milk fever or intravenous fluid therapy of a severely dehydrated neonatal dairy calf while is already hypothermic?

Don't send the farmer to provide large amounts of warm water to submerge the cold bottles into. Just bend part of the infusion set in a U-turn shape and insert it into a glass of warm water. Cold fluids will be warmed during their passage through the inserted part of the infusion set into warm water.
Several other shortcut procedures will be presented in the lecture