Anaesthesia of animals = “Veterinary Act”

FVE is opposed to the use of veterinary anaesthetics in animals by non-veterinarians or without the direct supervision in the presence of a veterinarian. Suitably trained and qualified person e.g. veterinary nurses may assist by acting as the veterinary surgeon’s hands.

We ask policymakers to strictly regulate access to general and local anaesthetics and to retain the use of anaesthesia to animals as a “veterinary act”. The health and welfare of animals, as well as the safety of operators and public health, should always overrule economic reasons.

Background

More and more countries are considering the possibility to allow non-veterinarians, i.e. persons with no academic medical training (such as farmers) to administer anaesthetics themselves for surgery on their animals. For pig castration, Switzerland allows the use of isoflurane by farmers, Sweden intra-scrotal use of lidocaine, Denmark intra-scrotal use of procaine, and Germany allows after training and defined conditions the use of isoflurane in piglets under 8 days and will allow it also in older pigs from 2021. The same practice is also allowed in other cases, such as Switzerland allows farmers to use anaesthesia for the dehorning of cattle. Animal shelters and wildlife centres also in certain cases let non-trained and non-qualified staff use anaesthesia e.g. to sedate pain, treat pain or euthanise animals under general anaesthesia.

FVE iterates that it is extremely important to use anaesthesia and analgesia for painful interventions such as for pig castration¹ and dehorning to prevent pain. FVE, however, is very concerned with the evolution, mostly motivated by economic arguments, to allow non-veterinarians to do so. These persons are not trained on the comparative basic physiology of the animal and pharmacology and toxicology of the medicines, and are not properly able to recognise the depth of the unconsciousness and whether or not the animal is in pain. Therefore, FVE considers this practice endangering animal health, animal welfare, operator safety and in some cases, the environment.

Reasons why veterinary anaesthesia is a “veterinary act”

Anaesthetics are hazardous medicinal products and anaesthesia is a process that requires very specialised knowledge:

- Veterinary anaesthesia is a core discipline of veterinary medical training and an important part of theoretical and clinical practice in all veterinary curricula. Additionally, it is not a stand-alone subject but closely linked and after other

¹ FVE position paper on pig castration: https://www.fve.org/publications/pig-castration/
core specialities of the veterinary curricula, such as anatomy, physiology, biochemistry, pharmacology, toxicology, therapy, and pathology.

- In some of the proposed uses (i.e., castration) pain will be experienced by the animal. Not all anaesthetics are painkillers. Only veterinarians are qualified with the knowledge of anaesthetic drugs to determine which are suitable for certain procedures. There is a risk of suffering if anaesthetics are used inappropriately and pain is not treated; generally anaesthetic has a narrow margin of safety.
- The subject matter of anaesthesia is very wide therefore many practising veterinarians continue to follow continuing professional development courses on the subject to be able to deliver anaesthesia effectively and safely.
- Before anaesthesia, the veterinary surgeon will examine if the general condition of the animal is fit enough to undergo anaesthesia and the nature of the optimal anaesthetic regime.
- General anaesthetics need to be administered according to very rigid procedures and with a lot of care. In many veterinary practices, a dedicated person e.g. a veterinary anesthesiologist or trained nurse will monitor the anaesthetic continuously while another veterinarian performs the surgery. In veterinary surgery theatres, essential parameters such as blood pressure will be continuously evaluated by dedicated pieces of equipment and a competent person to monitor the depth of anaesthesia.
- When using local anaesthetics, often prior sedation is needed and is vital to have proper knowledge and skills to make the injection at the correct site for desired anaesthetic effect, to evaluate effect and duration of anaesthesia, and to avoid overdose or intraarterial/intravenous injections.
- Each case is unique and not all animals respond the same way at the same protocols (“personalized animal application”). The veterinarian has the training and overall knowledge and skills to assess the general condition of the animal, to recognize and deal with risk associated with the anaesthesia procedures and modify the protocol accordingly.
- Anaesthesia, especially when not done according to protocol and under continuous skilled monitoring can lead to suffering and/or the death of the animal. Strict hygiene conditions must be kept for surgery to prevent infections. Special post-anaesthesia care needs to be given to animals due to the most common complications (emesis (vomiting), and respiratory depression, among others).
- General and local anaesthetics for animals are also pharmacologically active in humans. They can give rise to severe operator health and safety concerns. For example, exposure to leaking inhalation anaesthetic is associated with several health concerns. Accidental self-injection of anaesthetics can occur or anaesthetics accidentally enter the body, eye, skin, or mouth. For all these reasons, strict protocols and/or guidelines exist on the use of anaesthetics in veterinary medicine.
- Adverse events can occur with the use of anaesthesia, they should be reported into the “veterinary pharmacovigilance system”.
- Most anaesthetics are sensitive medicinal products that need special precautions to be taken, e.g. stored in the dark, use of opened bottles, etc. to ensure their efficacy and stability.
- The use of some anaesthetics e.g. inhalation anaesthetics requires special and expensive equipment (i.e., vaporizers and breathing circuits), which has to be maintained regularly. Without routine maintenance, the equipment can
become defective and dangerous. If this equipment is utilised in multiple farms, biosecurity risks can occur.

- Anaesthetics can be used for illegal purposes, e.g. to cause harm to other people or to commit suicide. Some anaesthetics are addictive and used as recreational drugs. Strict rules apply for the safe storage of anaesthetics, which are medicines that need a special prescription to obtain (narcotic drug Regulation). Veterinarians have to keep anaesthetics in a special locked cabinet and keep a detailed register of every quantity used by clinical indications.

- Some inhalation anaesthetics e.g. isoflurane is a climate gas.

- Regular shortages are seen with some anaesthetic drugs, meaning that veterinarians often experience shortages. In these circumstances, veterinarians are uniquely qualified and habilitated to determine suitable alternatives.

- Overall, the use of anaesthetics must be considered as a “veterinary act” and almost all procedures done under veterinary anaesthesia are also “veterinary acts”.