LMA ProSeal™ in the Veterinary Anaesthesia - the Animal is Patient as well.

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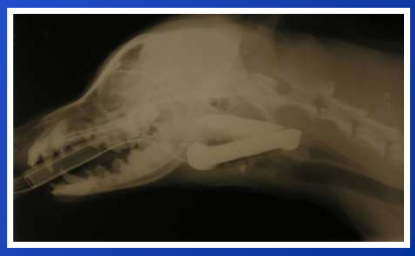
Background and Goal of Study:
Airway management during general anaesthesia [GA] is a cardinal problem in the veterinary anaesthesia as well. Open airways can be achieved by a change of a patient's head position, a face mask [FM] or by an insertion of an endotracheal tube [ETT]. These techniques have advantages and disadvantages. The introduction of the laryngeal mask [LMA] into human anaesthesia was a revolutionary breakthrough at the end of the 20th century which solved problems connected with the FM and ETT. The first use of LMA Classic™ in the veterinary anaesthesia dates back to 1991 and LMA ProSeal™[PLMA] to 2005.

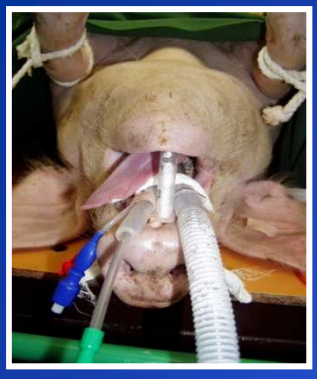




Materials and Methods:
The use of PLMA on animals n=49 in three species [dogs 35, sheep 7, swines 7] was studied. In all the animals Propofol without myorelaxants for the induction into GA, the cuff pressure 40cm H_2O, lubricant jelly without a local anaesthetic were used. Ventilation time [VT] through the PLMA, the signs of the gastric reflux [GR], successful PLMA insertion on the first attempt [SIFA] and the malposition [MP] were followed up. The proper position of PLMA, the position of its cuff in the hypopharynx was check by X Ray. The proper position of the distal aperture of the drain tube [DT] was confirmed by insertion of a gastric tube into oesophagus via DT. Three insertion techniques recommended for human anaesthesia and a bubble test were tested.



Results:
The three insertion techniques recommended in human anaesthesia are unsuitable to use in a veterinary anaesthesia. The bubble test should be modified because performing a suprasternal checking in animals is impossible. Cuff pressure mean values, with recommended maximum inflation volume, were: dogs 46 ±1,58 SD cmH_2O; sheep 46,17 ±0,9 SD cmH_2O; swine 46,5 ±1,12 SD cmH_2O. Statistical data are shown in the table:

	n	VT Ø min	GR %	SIFA %	MP %
DOG	35	76,43 ± 45,56 SD	8,6	91,4	5,7
SHEEP	7	50,71 ± 30,99 SD	71,4	100	0
SWINE	7	115,71 ± 41,98 SD	0,0	100	0




Conclusion:
The use of PLMA in the veterinary anaesthetic practice significantly improves airway management in animals during GA. On the basis of our results, it is possible to apply model PLMA designed for humans in the airway management in veterinary anaesthesia in these species: dogs, sheep, swine and roe deer. Airway protection in species having a high risk of regurgitation, like sheep, is excellent and continual regurgitation is easy to control via the PLMA drain tube.



Euroanaesthesia 2007
Munich, Germany, 9-12 June 2007