



Research Profile

Sabine B.R. Kästner

1983-1989	Studies in Veterinary Medicine Justus Liebig University, Giessen
1992	Dr. med. vet. Department of Veterinary Pathology, Justus Liebig University, Giessen.
1993-1995	Resident and Graduate Studies, Department of Large Animal Internal Medicine, University of Saskatchewan Saskatoon, Canada
1996	M. Vet. Sci. University of Saskatchewan, Saskatoon, Canada
1999-2006	Resident in Veterinary Anaesthesia and Habilitation, Department of Veterinary Surgery, Vetsuisse Faculty, University of Zurich, Switzerland.
2002	Diplomate of the European College of Veterinary Anaesthesia and Analgesia (Dipl. ECVAA).
since 2007	Professor of Veterinary Anaesthesia, Intensive Care and Pain Therapy at University of Veterinary Medicine, Hannover.

Current Research

Analgesic efficacy of gabapentin and pregabalin as add-on medication in postoperative neuropathic pain in dogs with intervertebral disc disease.

Comparison of the sedative, anaesthetic sparing, analgesic and cardiovascular effects of opioids and alpha 2 adrenergic agonists in cats. Fentanyl versus dexmedetomidine.

Anaesthesia with the steroid anaesthetic alfaxolon in cyclodextrin in turtles and tortoises. Dose finding studies and assessment of anaesthetic quality and safety.

Ventilation with the „open lung concept“ in the horse. Influence on alveolar integrity, inflammatory responses and cytokine expression.

Idiopathic headshaking in the horse as trigeminal neuropathy. Development of standard testing methods to detect allodynia for evaluation of effective treatment.

Future Projects and goals

Our future goals are to get a better understanding of neuropathic pain and treatment modalities in domestic animals.

The natural occurrence of the mdr1 gene defect in English sheepdog breeds gives us a chance to study disposition and effects of centrally acting analgesic and anaesthetic drugs in a larger mammal affected by this p-glycoprotein transporter protein.

Selected publications

S.B.R. Kästner, P. Wapf, K. Feige, D. Demuth, M. Akens, R. Bettschart-Wolfensberger and M. Huhtinen. (2003)

Pharmacokinetics and sedative effects of intramuscular medetomidine in domestic sheep. *J. vet. Pharmacol. Therap.* **26** (4), 271-276.

S.B.R. Kästner, S. Kull, A.P.N. Kutter, J. Boller, R. Bettschart-Wolfensberger, M. Huhtinen (2005)

Cardiopulmonary effect of dexmedetomidine in sevoflurane-anesthetized sheep with and without nitric oxide inhalation. *Am. J. Vet. Res.*, **66**: 1496-1502.

A.P.N. Kutter, S.B.R. Kästner, R. Bettschart-Wolfensberger, M. Huhtinen (2006)

Cardiopulmonary effects of dexmedetomidine in goats and sheep during sevoflurane anaesthesia. *Vet. Rec.*; **159** (19), 624-9.

S.B.R. Kästner, J. Boller, A.P.N. Kutter, S.M. Pakarinen, M.P. Ramela, M. Huhtinen (2006) Comparative pharmacokinetics of dexmedetomidine and levomedetomidine in goats and sheep during sevoflurane anaesthesia. *J. Vet. Pharm. Therap.* **29**, 63-66.

S.B.R. Kästner, S. Ohlerth, A. Pospischil, J. Boller, M. Huhtinen (2007)
Dexmedetomidine-induced pulmonary alterations in sheep. Res. Vet.
Sci., **83**: 217-226.

Group structure

Group leader: Sabine Kästner
Residents: Julia Tünsmeier, Klaus Hopster
Graduate Students: Gerda Krahnert, Kirsten Biermann, Sonja
Aghighi

Contact

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