



Hands-on Workshop in Private Veterinary Practice/Hospital - Techniques of Loco-Regional Anesthesia & Analgesia in Small Animals -

SUMMARY

In the past 2 decades local and regional anesthetic and analgesia (LRAA) techniques have gained increasingly more popularity as a very effective method of perioperative pain management, initially predominantly in human anesthesia but more recently also in small animal practice. The 3-day training course (2-day workshops are an option as well) is primarily addressing veterinarians and their staff with interest in deepening their knowledge in Small Animal LRAA and offering their canine and feline patients advanced methods of pain therapy throughout the perioperative period. We will conduct this training program locally in your own veterinary practice or hospital environment following a discussion with the practice/hospital leadership. The workshop provides the veterinary staff the opportunity to familiarize themselves with the most common techniques of LRAA through a combination of overview lectures and specific exercise sessions. The goals of the workshop are: (a) refreshing the basic knowledge of LRAA-relevant neuroanatomy; (b) providing participants with an overview of the basic principles and functions of the equipment used in LRAA (ultrasound technology and probes, neurostimulators for electrolocation of peripheral nerves); (c) demonstrating and discussing the various LRAA methodologies (including aspects of pharmacology and toxicology of local anesthetic and adjuvant drugs) and related anatomical landmarks and possible complications; and (d) guiding the participants during the exercise sessions when they begin practicing various LRAA techniques in cadavers and teaching objects. At the end of the workshop, the participants should have acquired the practical knowledge and skill set necessary to successfully implement LRAA techniques in their clinical practice. Continued education credits will be requested if desired. A more detailed layout of a 3-day workshop can be found below. Dependent on local circumstances, Narkovet Consulting® may be able to apply for recognition of the workshop as a continued education event. For further details of the training program see under course program below.

Program

(Changes may still occur)

Day 1

- 08:30 – 09:00 Registration of participants and presentation of course handouts
- 09:00 – 09:30 Introduction & Learning Objectives
- 09:30 – 11:00 Equipment

- Needles, catheters, pumps
- Nerve stimulators
- Ultrasound

11:00 – 12:00 Safety and Complications associated with LRAA

12:00 – 14:00 *Lunch break*

14:00 – 18:00 Dental and eye blocks (1 h lecture, 3 h wet lab exercises)

- Infraorbital nerve block
- Maxillary nerve block
- Middle mental nerve block
- Inferior alveolar nerve block
- Retrobulbar block
- Trigeminal nerve block (ultrasound)
- Illustration and exercises on cadavers

Day 2

08:00 – 13:00 Spinal-/Epidural Anesthesia and Analgesia (1 h lecture, 3 h wet lab exercises)

- Lumbosacral approach
- Interlumbar approach
- Sacrocaudal and intercaudal approaches
- Blind
- Nerve stimulation
- Ultrasound
- Single injection
- Catheter placement
- Illustration and exercises on cadavers

13:00 – 14:00 *Lunch break*

14:00 – 18:15 Pelvic limb (1 h lecture, 3 h wet lab exercises)

- Sciatic nerves blocks (nerve stimulation and ultrasound)
- Saphenous nerve block (blind)
- Saphenous nerve block (ultrasound)
- Lateral cutaneous femoral nerve block (blind)
- Femoral nerve blocks (nerve stimulation, ultrasound)
- Obturator nerve block (blind, nerve stimulation and ultrasound)
- Intra-articular analgesia (coxofemoral, stifle)
- Catheter placement
- Illustration and exercises on cadavers

Day 3

08:00 – 13:00 Thoracic Limb (1 h lecture, 3 h wet lab exercises)

- Cervical paravertebral block (nerve stimulation)
- Brachial plexus block (nerve stimulation, ultrasound)
- Radial, ulnar, median, and musculocutaneus (RUMM) nerve blocks (nerve stimulation, ultrasound)
- Intra-articular analgesia (shoulder, elbow)
- Illustration and exercises on cadavers

13:00 – 14:00 *Lunch break*

14:00 – 15:30 LoCo-regional anesthesia in the wound area (0.5 h lecture, 1 h wet lab exercises)

- Catheter and infusion pumps
- Illustration and exercises on cadavers

15:30 – 18:00 Locoregional anesthesia of the chest wall and abdomen (1 h lecture, 2 h wet lab exercises)

- Intercostal nerve block (blind, nerve stimulation and ultrasound)
- Transversus abdominis plane (TAP) block (ultrasound)
- Illustration and exercises on cadavers

Instructor(s): Veterinary instructor(s) with expertise in LRAA (1 per 6-8 veterinary participants)

Organizer: Narkovet Consulting®, LLC., 406 Braemar Court, Chadds Ford, PA 19317

Fees 3-d workshop: **950.00 \$** per veterinary workshop participant (**600.00 \$** per veterinary technician) or per half-day session 200 \$ per veterinary workshop participant and 100 \$ per veterinary technician who picks only certain half-day sessions.

Fees 2-d workshop*: **750.00 \$** per veterinary workshop participant (**400.00 \$** per veterinary technician) or per half-day session 200 \$ per veterinary workshop participant and 100 \$ per veterinary technician who picks only certain half-day sessions.

(*Programs for 2-day workshops will be designed in collaboration with the leadership of the individual practice/hospital based on specific training needs.)

Minimum number: **Six full workshop veterinary participants.**
of participants

Consulting benefit participants: **One year free access to LRAA expert instructors through Narkovet Consulting® internet portal (www.narkovet.com) under “Internet Query and Consulting Request”.**

- Requirements:**
- (a) The veterinary practice/hospital is advised to make available:
 - accommodation for instructor(s)
 - a large enough conference/seminar room and separate close-by space sufficient in size to fit 3 tables each per group of 6 participants for the hands-on sessions
 - a sufficient number of frozen cadavers (2 canine cadavers (10-15 kg heavy; canines < 10 kg are not well suitable for training purposes) per day and table) that were immediately post mortem completely clipped, then frozen, and thawed 24-36 hrs prior to each course day
 - (b) 1 Perifix or Perifix One oder Stimuplex or Stimuplex Duo electrical stimulator per table (only in freshly euthanized animals electrolocation can be practiced)
 - (c) Perican or similar spinal needles (18, 20 and/or 22G) from Arrow and spinal catheters like the Perifix or Perifix One or Stimuplex and/or Stimuplex Duo and Plexufix 30° or similar needles and catheters from B. Braun
 - (d) Ultrasound devices equipped with adequate linear and microconvex probes suitable for vascular imaging (Sonosite® and similar manufacturers have previously been very forthcoming to support those type of training courses)

- Reference texts:**
1. Small Animal Regional Anesthesia and Analgesia by Luis Campoy (Editor) & Matt Read (Editor), ISBN: 978-0-8138-1994-5, 2013, Wiley-Blackwell
 2. Handbook of Small Animal Regional Anesthesia and Analgesia Techniques by Phillip Lerche, Turi Aarnes, Gwen Covey-Crump, Fernando Martinez Taboada; ISBN: 978-1-1187-4182-5, 2016, Wiley-Blackwell

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