



4th ECVSMR Scientific Meeting

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PROCEEDINGS



EUROPEAN COLLEGE
OF VETERINARY SPORTS MEDICINE
AND REHABILITATION



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PRESIDENT MESSAGE

Dear colleagues,

On behalf of the European College of Veterinary Sports Medicine and Rehabilitation, I welcome you to our 4th scientific meeting in the enchanting city of Paris, often hailed as the "City of Love" and the epitome of elegance, where iconic landmarks such as the Eiffel Tower and the Louvre Museum stand as testaments of human achievement and artistic brilliance.

The scientific and organizing committee has prepared fascinating pre-congress workshops and an extraordinary programme with top-notch presentations from world-renowned speakers. In the captivating atmosphere of the National Veterinary School of Alfort, one of the oldest veterinary schools in the world (established in 1766), our heartfelt gratitude goes to the speakers, who will share their expertise, experiences, and insights with us. Their contributions will undoubtedly broaden our horizons, stimulate thought-provoking discussions, and inspire future breakthroughs. More specifically, many animal-use activities are currently facing challenges to their social license to operate, and with several of this year's sessions devoted to welfare, doping and performance, this meeting will spark further discussion, ultimately for the benefit of the animals under our care.

T.S. Eliot once noted, "The chief danger about Paris is that it is such a strong stimulant". Let us therefore engage in meaningful exchanges, forging new connections and fostering partnerships that will continue to shape the landscape of veterinary sports medicine and rehabilitation!

Kind regards,



Maarten Oosterlinck
President ECVSMR

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SMALL ANIMAL PROGRAM

20/07/2023 PRE-CONGRESS DAY

8.30-18.00 Registration

WORKSHOPS

7.45-15.45 Sport Dogs Medicine, from check-point to check-point
Rob Gillette (USA), Barbara Bockstahler (Austria), Giuseppe Spinella (Italy), Joao Alves (Portugal), Capucine Gallet (France), Dominique Grandjean (France).

RESIDENT FORUM

Moderators: Annamaria Nagy and Marion Mucha

- 16.00-16.20 A functionalized nanogel combining prolonged mechanical and biological effects as a novel intra-articular treatment for osteoarthritis in the horse: a double- blinded, controlled and randomized safety study. (Terlinden A, Jacquet S, Cuiller A, Cassé F, Legendre F, Manivong S, Garcia A, Roullin G, Moldovan F, Banquy X, Galéra P, Audigié F, Demoor M, Bertoni L)
- 16.20-16.40 Improvement of gastric ulcer and ridden horse pain ethogram scores with diet adaptation in sport horses. (Pineau V, Woort F, Julien F, Vernant M, Lambey S, van Erck-Westergren E)
- 16.40-17.00 An ex-vivo study evaluating potential iatrogenic damage after using the axial sesamoidean approach for synoviocentesis of the equine digital flexor tendon sheath. (Gruyaert M, Jansen F, Oosterlinck M)
- 17.00-17.20 Effect of speed on variations of the vertical displacement of the trunk in horses at trot on a water treadmill: preliminary results. (Fraschetto C, Jacquet S, Moiroud C, Audigié F, Chateau H, Hatrisse C, Denoix JM)
- 17.20-17.40 Pilot study to investigate intra- and interobserver agreement on calculation of pressure plate data in lame trotting dogs. (Bogaerts E, Brondeel C, Coppieters E, Broeckx B, Van Ryssen B, Samoy Y)

EVENING PROGRAM

19.00-21.00 Welcome reception and announcement of the winners of the VAHL Award

21/07/2023 DAY 1

08.00-8.45 Registration

08.45-9.00 Opening ceremony

KEYNOTE

Moderator: Dominique Grandjean

09.00 -09.45 Management Strategies to reduce occurrence of overheating in Working Dogs
Rob Gillette (USA)

9.45.-10.15 *Coffee break*

FREE COMMUNICATIONS

Moderator: Dominique Grandjean

10.15-10.35 The effect of different substances combinations administered through mesotherapy for dogs with hip osteoarthritis (João C. Alves - Portugal)

10.35-10.55 Rehabilitation applied to vestibulo-cerebellar syndrome in presumed cerebellar hypoplasia: can we avoid euthanasia? (Diane Grosjean - Belgium)

10.55-11.15 Therapeutic effects of the treatment with radiofrequency at 448 kHz in 10 dogs with coxarthrosis, A pilot study ((Christiane Lutonsky - Austria)

11.15-11.35 Development of a new guide dog harness using a three-dimensional musculoskeletal model of inverse kinematics (Masoud Aghapour - Austria)

11.35-11.55 First steps in discipline-specific canine exercise physiology: a field study on canicross dogs (Irène Tosi - Belgium)

11.55-12.10 Intra-articular blood cell secretome, triamcinolone, or both in dogs with hip osteoarthritis – a cross-over study (João C. Alves - Portugal)

12.10-13.30 *Lunch, Poster session*

12.45-13.30 Preparatory session for the ECVSMR residents examination (Florian Buchner, Annamaria Nagy)

SESSION 1: ANIMAL WELFARE/DOPING

Moderator: Barbara Bockstahler

13.30-14.40 All you need to know about doping and its future (Xavier Bigard - France)

14.40-15.10 Concrete positive doping cases in sporting dogs (Dominique Grandjean - France)

15.10-15.40 *Coffee break*

15.40-16.20 The commitment of veterinary teams to animal welfare in mid-distance sled dog races (Mila Benito - Spain)

16.20-17.30 Round table on Animal Welfare/Doping (Rob Gilette, Mila Benito, Dominique Grandjean)

17.30 *End of the day 1*

EVENING PROGRAM

19.30-23.00 Gala dinner (boat trip on the Seine)

22/07/2023 DAY 2

08.15-09.00 Registration

SESSION 2: SLED / WORKING DOGS (1)

Moderator: Marion Mucha

09.00-09.25 Ultrasonic screening of sporting conditions in mid-distance sled dogs (Mila Benito - Spain)

09.25-09.50 Lekkarod sled dog r2023: about the 3 main racing pathologies (Vinciane Roger - France)

09.50-10.15 About new services offered by working dogs (Dominique Grandjean - France)

10.15.-10.45 Coffee break

SESSION 3: MUSCLE INJURIES ULTRASONOGRAPHY - BLOOD LACTATE MONITORING

Moderator: Marion Mucha

10.45-11.30 Muscle injuries ultrasonography (Giuseppe Spinella - Italy)

11.30-12.00 Blood lactate monitoring for exercise conditioning in dogs (João C. Alves - Portugal)

12.00-13.45 Lunch, Poster session

KEYNOTE

13.45-14.30 Conditioning strategies to enhance performance and reduce risk of injuries in athletic and working dogs (Rob Gillette - USA)

SESSION 4: SHOULDER

14.30 -15.00 Why do shoulder injuries happen in agility dogs? Exploring the clinical biomechanics of common injuries (Barbara Bockstahler - Austria)

15.00-15.30 Physical therapy for shoulder disorders. What can be done and what can we expect? (Marion Mucha - Austria)

15.30-16.00 Coffee break

SESSION 5: SLED / WORKING DOGS (2)

16.00-17.00 45 years with racing sled dogs...what did they bring to canine science and medicine? (Dominique Grandjean - France)

17:00 Closing Ceremony

First steps in discipline-specific canine exercise physiology: a field study on canicross dogs

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Background and objective

Canicross and its derivatives are burgeoning sports activities for the dog-master duo; nonetheless, scientific knowledge in this field is lacking. Our objective consisted in a first approach to this gap.

Material and Methods

On December 2021 (5°C, 80% humidity) and May 2022 (20°C, 54% humidity), we recruited 9 and 11 dogs covering a distance of 5.7 and 4 km, respectively. We collected physical and blood parameters as heart rate (HR), respiratory rate (RR), rectal temperature (RT), hematology, biochemistry, blood lactate and glucose, at rest (T0), immediately (T1) and 1 hour after exercise (T2). We performed an ANOVA on repeated measures.

Results

On December as on May, we observed a significant increase in RT and HR. Mean RT at T1 was more than 1°C higher on May (40.49±0.88) than on December (39.29±1.06). Hematocrit increased with exercise in both conditions, the rise being significant only in December. Concerning electrolytes, only Mg decreased with exercise on December, whereas also other electrolytes (Cl, K, Ca, P, Mg) changed on May. Biochemistry was unchanged, except for creatinine on May. Lactate was not affected by exercise on December but increased significantly on May from T0 to T1.

Discussion

Few parameters were modified in cold conditions, while electrolytes and lactate significantly changed in warmer conditions. The difference in the increase of RT between December and May is a crucial parameter for animal welfare. Hypomagnesemia with exercise was common to both situations.

Conclusions

Research on canine exercise physiology deserves development to support owners and veterinarians.

Conflict of interest: The authors declare no conflict of interest

Ethical committee: The study was approved by the Animal Ethical Committee of the University of Liège (N° of approval 21-2396)

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