Course program

AOVET Course—Principles in Small Animal Fracture Treatment

16-18 June 2015, León, Spain

Course Chairman: Aldo Vezzoni
Fidel San Román Ascaso
Value statement

AOVET is committed to improving the quality of patient care through state of the art education, which combines presentations from leading specialists in the field with the practice of surgical skills and techniques on anatomic models. This well-established and proven combination allows the veterinary surgeon to apply theory in practice with the goal of improving his/her treatment techniques for the benefit of the patients and their owners.

The AO principles of fracture management

Fracture reduction and/or alignment to restore normal anatomical relationships

Preservation of the blood supply to the soft tissues and the bone through a careful approach, gentle reduction and alignment techniques and atraumatic tissue handling

Early and safe mobilization and rehabilitation of the injured part/body region and the patient as a whole

Fracture fixation providing absolute or relative stability as required by the type of fracture, but also influenced by the injured bone, the patient, and the soft tissue condition
Dear AOVET course participant

We welcome you to this AOVET course and hope that your experience here will encourage you to become more interested in the AO community, specifically in AOVET.

What is AOVET? We are veterinarians associated with the AO Foundation and we form one of the organization’s four Specialties along with AO CMF, AO Spine and AO Trauma. The goal of all Specialties is to integrate applied and clinical research, education and community development functions into one direction for the benefit of our members, stakeholders and patients.

How can AOVET help you? By working together and forming a dynamic group, we improve our ability to focus and leverage our resources, expertise and skills. This leads to better results and more rewards and benefits for our members.

Why should you join AOVET? We NEED YOU! By joining AOVET you will become part of the veterinary family within the AO Foundation. Through this membership you will develop lifelong friendships with leading veterinary specialists in trauma care as well as with key players in human CMF, Spine and Trauma surgery. Being involved with these stimulating groups will help you to expand your “knowledge network” and will provide new opportunities to advance veterinary trauma care.

Yours sincerely,
Course description

The AOVET Principles Course is focused on the treatment with internal fixation of the most common fractures of small animals, by applying the AO principles.

This course is the cornerstone of the training in the operative treatment of fractures.

Learning objectives

- Recognition of the role of biology and mechanical aspects in the process of fracture healing.
- Learning and applying the AOVET principles in treating diaphyseal fractures of the appendicular skeleton.
- Acquisition of practical skill in the treatment of diaphyseal fractures through exercises on plastic bones.
- Recognition of the risks and potential intra-operative complications related to the treatment of fractures.
Course International Chairman

Aldo Vezzoni
Dipl ECVS
Clinica Veterinaria Vezzoni srl Cremona, Italy.

Course National Chairman

Fidel San Román Ascaso
Dipl EVDC

Faculty

José Altonaga
Prof. Tit. Cirugía Fac. Vet. León.

Josep de la Fuente

Mike Farrell
Dipl ECVS. Senior Surgeon of Fitzpatrick Clinic Referrals. United Kingdom.

José Manuel Gonzalo Orden

Roberto Kostlin
Dipl ECVS. Ex. Prof. Cirugía Fac. Vet Munich. Germany.

Ulrike Matis

Jesús Rodríguez Quirós

Miguel Ángel Sánchez-Valverde

Assistants

Manuel García Gómez
Becario Cirugía Fac. Vet. León.

Fidel San Román-Llorens
PhD, Internship in Fitzpatrick Clinic.

Course local organization

Fundación para el estudio de la Osteosíntesis AO España (sección AOVet)
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28014 Madrid, Spain
Phone: +34 917 226 643
Email: egutie10@its.jnj.com
mvillaab@its.jnj.com
Tuesday June 16, 2015

08:30 - 09:00 h.   Registration of participants
09:00 - 09:10 h.   Welcome and presentation of the Course  F. San Román Ascaso

Module 1.
SCIENCE OF BONES, FRACTURES AND IMPLANTS

09:10 - 09:20 h.  AO History and Philosophy  A. Vezzoni
09:20 - 09:40 h.  Bone Structure, Vascularity and Function  A. Vezzoni
09:40 - 10:10 h.  Bone Healing Under Stable and Unstable Conditions  J. M. Gonzalo
10:10 - 10:40 h.  Fracture Classification and Biomechanics  M. Farrell
10:40 - 11:00 h.  Coffee Break

Module 2.
AOVET Principles

11:00 - 11:30 h.  Principles of Bone Screw Function: Plate Screw, Position Screw, and Lag Screw  M. Farrell
11:30 - 12:00 h.  Principles and Clinical Application of Cerclage Wiring  M. Farrell
12:00 - 12:30 h.  Principles and Clinical Application of Tension Band Wiring  M. Farrell
12:30 - 13:00 h.  The surgical approach and soft tissue handling  M. A. Sánchez-Valverde
13:00 - 14:00 h.  Lunch
14:00 - 16:00 h.  Practical Exercises: Lab 1
                      Introduction to instruments, neutral screw, compression screw, cerclage wire  M. Farrell  J. M. Gonzalo  F. San Román-Llorens
16:00 - 16:30 h.  Coffee Break
16:00 - 16:55 h.  Principles and Clinical Application of Dynamic Compression Plate (DCP), Limited Contact-Dynamic Compression Plate (LC-DCP) and Locking Compression Plate (LCP)  A. Vezzoni
16:55 - 17:20 h.  Principles and Clinical Application of Neutralization Plate Stabilization  J. Rodríguez
17:20 - 17:45 h.  Principles and Clinical Application of Intramedullary Fixation  J. de la Fuente
17:45 - 18:10 h.  Principles and Clinical Application of Buttress/Bridge Plate and Plate/Rod Stabilization  A. Vezzoni
18:10 - 18:40 h.  Principles of Joint Fracture Treatment  M. A. Sánchez-Valverde
19:00 h.  Sum-up of the day
Wednesday 17 June 2015

08:30 - 10:00 h. **Practical Exercises: Lab 2**

- Femoral oblique fracture fixed with IM pin and cerclage wires. M. A. Sánchez-Valverde
- Humeral lateral condyle fracture fixed with compression screw and pin. A. Vezzoni
- Transverse radial fracture fixed with compression plate. M. García

10:00 - 10:30 h. Fracture reduction techniques A. Vezzoni

10:30 - 11:00 h. Coffee Break

**Module 3. Treatment of diaphyseal fractures**

11:00 - 11:30 h. Humeral fractures U. Matis

11:30 - 12:00 h. Radius-ulna fractures R. Köstlin

12:00 - 13:00 h. Fireside discussion

13:00 - 14:00 h. Lunch

14:00 - 16:00 h. **Practical Exercises: Lab 3**

- Butterfly tibial fracture fixed with neutralization plate U. Matis
- Comminuted femoral fracture fixed with plate and rod R. Köstlin
- Iliac fracture fixed with plate F. San Román-Llorens

16:00 - 16:30 h. Coffee Break

16:30 - 17:00 h. Femoral fractures U. Matis

17:00 - 17:30 h. Tibia fractures J. Altonaga

17:30 - 18:30 h. Fireside discussion

18:30 - 19:00 h. Sum-up of the day
### Thursday 18 June 2015

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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>08:30 - 09:00 h.</td>
<td>Pelvic fractures</td>
<td>U. Matis</td>
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<tr>
<td>09:00 - 09:30 h.</td>
<td>Fractures in growing animals</td>
<td>R. Köstlin</td>
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#### Modulo 4. Complications

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<tr>
<th>Time</th>
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<th>Speaker</th>
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<tr>
<td>09:30 - 10:00 h.</td>
<td>Radiographic Assessment of Fracture Healing</td>
<td>M. Farrell</td>
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<td>10:00 - 10:30 h.</td>
<td>Delayed Union and Nonunion</td>
<td>F. San Román Ascaso</td>
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<td>10:40 - 11:00 h.</td>
<td>Coffee Break</td>
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<tr>
<td>11:00 - 11:40 h.</td>
<td>Diagnosis and treatment of osteomyelitis</td>
<td>A. Vezzoni</td>
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<td>11:40 - 12:10 h.</td>
<td>Open fractures</td>
<td>J. Rodríguez</td>
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<td>12:10 - 12:30 h.</td>
<td>Post-operative management</td>
<td>J. de la Fuente</td>
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<td>12:30 - 13:00 h.</td>
<td>Implant Removal</td>
<td>U. Matis</td>
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<td>13:00 - 14:00 h.</td>
<td>Lunch</td>
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<td>14:00 - 15:00 h.</td>
<td><strong>Practical Exercises: Lab 4</strong></td>
<td>J. de la Fuente</td>
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<td>“Fracture game”</td>
<td>J. Rodríguez</td>
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<td>Oblique humeral fracture</td>
<td>J. Altonaga</td>
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<td>15:00 - 15:30 h.</td>
<td>Instrumentation and implants to get started</td>
<td>A. Vezzoni</td>
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<td>15:00 - 16:00 h.</td>
<td>Fireside discussion</td>
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<td>16:00 - 16:30 h.</td>
<td>Coffee Break</td>
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<td>16:30 - 17:30 h.</td>
<td>Sum-up of the Course</td>
<td>A. Vezzoni</td>
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<td>What did we learned?</td>
<td>U. Matis</td>
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<td>Participation Certificates and End of the Course</td>
<td>R. Köstlin</td>
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<td>M. Farrell</td>
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Course organization

AO Foundation
AOVET
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Course logistics

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Course information

Course fee
AOVET Course—Principles in Small Animal Fracture Treatment.
Course registration fee: 650 Euros.
Account Number: ES17 0075 0953 6006 0124 5244
Banco Popular Espanol.

Accreditation
AOVET Course accreditation varies from country to country.

Evaluation guidelines
All AOVET courses apply the same evaluation process, either ARS (audience response system) or paper and pencil questionnaires. This will help AOVET to ensure that we continue to meet your training needs.

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Recording, photographing, or copying of lectures, practical exercises, case discussions, or any course materials is absolutely forbidden.

Security
Security check at the entrance of the building. Wearing of a name tag is compulsory during lectures, workshops, and group discussions.

No insurance
The course organization does not take out insurance to cover any individual against accidents, thefts or other risks.

Mobile phone use
Mobile phone use is not allowed in the lecture halls and in other rooms during educational activities. Please be considerate of others by turning off your mobile phone.

Dress code
Casual.

Further information
Number of participants: 24.
Course venue

**Venue:**
Universidad de León  
Facultad de Veterinaria  
Campus de Vegazana  
24071 León

**Hotel:**
Hotel AC León San Antonio  
C/ Velázquez, 10  
24005 León.