Preparing for the ECVO examination

David Gould (Chair, ECVO examination Committee)

(Taken and prepared by H. Field & G. Payen; session was recorded)

<u>Attendees</u>

Mentors: D Gould, J Oliver, T Pena, C Watté

<u>Residents</u>: Radka Andrysikova, Kellam Bayley, Karin Berggren, Klaas-Ole Blohm, Christina Casola, Audrey Chanoit, Andra Enache, Elena Fenollosa-Romero, Stamatina Giannikaki, Savina Gogova, Aure-Eline Grillot, Siv Grosas, Alexandre Guyonnet, Negar Hamzianpour, Emily Jeanes, Sarah Koll, Rachel Lockhart, Serena Maini, Katherine Manchip, Minna Mustikka, Angel Ortilles, Tobias Revold, Aurélie Sauvage, Inge Slenter, Lena Ström, Chantal Van Schaik, Marta Vinas Portillo

ECVO Examination Committee:

- Chosen by Executive Committee, with input from Chair of Examination committee
- Come from a broad range of countries and residency training programmes
- Have varied research, teaching or clinical interests
- Represent academia and private referral practice
- Are experienced in clinical work/ teaching/ examinations
- All current members:
 - Have completed an ECVO or ACVO-approved residency training programme
 - Have passed the ECVO and/or ACVO examination

Current members & qualification

- David Gould (chair) (UK) (ECVO)
- Charlotte Keller (Vice-Chair) (Switzerland/Canada) (ACVO)
- Christine Heinrich (Germany/UK) (ECVO)
- Marta Leiva (Spain) (ECVO)
- Ernst-Otto Ropstad (Norway) (ECVO)
- Simon Pot (Netherlands/Switzerland) (ACVO)
- Barbara Braus (Germany) (ECVO)

Sitting the ECVO examination

- Completed approved RRTP/ARTP
 - Approved by Education & Residency Committee (ERC)
- Approved by Credentials Committee (CC)
- Completed and submitted exam application form and fee in time (1st December)
- Must sit within 3 years of residency completion
- Must pass within 8 years
- May resit up to four times (subject to approval by Exam Committee and CC chair)

ECVO examination

- Held yearly (usually Feb-April)
- First-time candidates must sit full examination
- Resit candidates may resit only failed sections (MCQ, slide and/or practical)
 - o But entire practical section, not single parts

The examination is conducted in English. Candidates should be sufficiently proficient in English to be able to read, write and understand veterinary publications and examination questions written or spoken in English. The examination is structured to minimise any disadvantage of non-native English language speakers.

ECVO Examination format

- MCQ
 - 4 papers, 50 MCQ, 2 hours/ paper
 - o Total 200 MCQ
- Slide
 - 2 papers x 50 short answer
 - o Total 100
- Practical
 - 3 stations:
 - Clinical examination
 - Extraocular surgery
 - Intraocular surgery
- Day 1
 - o 9:00-11:00 MCQ 1
 - 11:30-13:30 MCQ 2
 - o 14:30-16:30 Slide exam 1
 - 16:30 Practice op microscope
- Day 2
 - 9:00- 11:00 MCQ 3
 - o 11:30-13:30 MCQ 4
 - 14:30-16:30 Slide exam
 - 16:30 Practice op microscope
- Day 3
 - Practical

Prior to any practical exams you have the opportunity to become familiar with the equipment ('Practice op microscope'). The practical exam tends to take place on the last day, we try to organise the residents into groups so they are not there for the whole day. The Exam Committee cannot accommodate requests for time frames so residents have to be prepared to be around for the whole day.

Practical Examination

- Clinical examination 45'
 - 1 full ophthalmic examination, 1 part examination on any species will be requested of residents
 - Candidates draw/write findings

Candidates will be supplied with some examination papers so will have a record for any appeals.

- Extraocular surgery 45'
 - Adnexal surgical procedure on cadaver
- Intraocular surgery 45'
 - Components of extracapsular cataract extraction on cadaver globe

For regularity between candidates there are 2 examiners per station, one likely to be watching and one to be taking notes on your performance. It is a thorough and robust procedure. A PDF will be available on the website.

The Angoff marking scheme

The Angoff marking scheme is considered one of the most reliable and defensible methods available of setting passing points. It is used for slide and MCQ exams and ensures consistency.

- Relies on the pooled judgments of content experts
- A group of experts is asked to judge each MCQ: 'what is the probability that a `minimally acceptable' candidate will answer this item correctly?' This prompts the judges to consider a group of minimally acceptable candidates and what proportion of that group will answer each MCQ correctly
- Results are averaged to represent the minimally acceptable score. The 'raw passing point' for the examination is based on this pooled judgment
- Statistical adjustment for testing error (SD) is provided to give the benefit of the doubt to examinees that score just below the level judged by the content experts to be the raw passing point
- Since the ECVO exams are revised regularly, the content and difficulty level changes. As a result, the passing point varies from year to year

When the scores come in they are plotted on a graph showing the raw passing point. This is where the standard deviation comes into play: once the results are plotted some candidates may be just under the raw passing point. At the discretion of the Committee, the passing point may then be lowered by up to three standard deviations in order to allow for such 'clustering'.

Practical marking scheme

Each station (clinical examination, extraocular surgery, intraocular surgery) of the practical is graded out of 10 marks and covers the following 3 parts. There are at least 2 examiners. Contemporaneous notes are taken. Mark is agreed immediately. Pass mark is 20/30 (66.6%). If a candidate scores 4/10 or less in any single practical station then they will be judged as having failed the entire practical exam, regardless of their performance in the other two stations.

- <u>Clinical examination is marked on:</u>
 - Use of a wide range of appropriate equipment
 - o Routine standard and thorough clinical approach
 - \circ $\;$ Completion of the examination within the time frame given
 - o Accurate drawing/description of the clinical findings
 - Relevant discussion on prognosis, treatment, etc.
- Extraocular surgery is marked on:
 - \circ Set up of gear (bring your own equipment). The committee likes to see resident set this up
 - o Surgical planning
 - Use of correct equipment: surgical loupes should be used
 - o Tissue handling
 - Surgical technique
 - Suture selection, handling, tying knots
 - o Complete the procedure in the time limits
- Intraocular surgery is marked on:
 - o Set-up
 - Use of microscope:
 - Focus
 - Correct use of zoom
 - Correct adjustment of eye pieces
 - Use of disposables
 - o Selection and handling of instruments
 - Tissue handling
 - Surgical technique
 - Suture selection, handling
 - Use of allotted time

The fail report

Those candidates who fail practical exam will receive a detailed report that will have been fully discussed and validated by the entire exam committee. This report lists important aspects of the relevant practical stations. This report is written the same day of the exam, immediately after practical examining has concluded. The report does not list every single point – succinct due to time constraints. The report is meant to be constructive to help for future exams.

Appeals

Appeals are allowed in writing to the ECVO secretary within 90 days of the date of results notification. The President will select an appeals committee of three who are not officers or members of the exam committee to review the report and they will respond within 60 days.

• Include a statement of the grounds for reconsideration and documentation in support

- The President shall appoint a committee of three Diplomates who are not officers or members of the Examination Committee to serve as an Appeals Committee within 30 days of notice of an appeal
- Chairperson of the Examination Committee shall submit the examination and scores of the candidate, the complete list of scores of all candidates on that examination, and a statement of the criteria used for the Committee's recommendation for pass and fail to the Appeals Committee indicating the reason(s) for rejecting the candidate
- The Appeals Committee shall return its verdict within 60 days of its appointment

Preparing for the MCQ

Exam instructions for candidates document states:

- 200 multiple choice questions designed to test theoretical knowledge in the field of veterinary ophthalmology and associated sciences, covering the disciplines of ocular anatomy, embryology, physiology, pharmacology, microbiology, histopathology, cytology, toxicology, immunology, molecular biology, genetics, medicine, surgery, diagnostics, diagnostic imaging and neuro- ophthalmology in canine, feline, equine, large and small ruminant, poultry, laboratory animal, exotic animal and wildlife species. The questions encompass all the anatomic regions of the eye and incorporate the categories of examination, assessment, diagnosis and treatment.
- Questions are based on papers from selected journals, books and classic articles as listed in the ECVO residents reading list
- 20 sample questions on ECVO website

MCQ should:

- Be clinically relevant
- Avoid trivia
- Not be designed to 'trick' candidates

Residents will find the tips below available in the information brochure. Residents should ensure they read the current reading list updated on the website for the exam. There are 20 retired example questions available on the website that you may review. There are no trick questions. Residents should ensure their mentor goes through these questions with the resident.

Preparing for the slides

Exam instructions for candidates document states:

- The slide recognition test consists of PowerPoint-projected images of 100 clinical cases, designed to test clinical diagnostic and descriptive skills in the field of veterinary ophthalmology as well as in associated sciences, including applied diagnostic imaging, cytology, microbiology, and histopathology
- Questions may involve the identification, assessment, and interpretation of the appearance and information presented on a photographic image. The slide recognition test is conducted in a non-verbal fashion, and candidates are asked to respond to

written questions with a short answer written response. For each of the 100 clinical cases there are usually 1 to 4 questions

- Images include clinical photographs/diagrams, diagnostic techniques, cytological specimens, and gross and microscopic pathological specimens. Questions typically include such items as listing lesions or species, morphologic structures and surgical instruments
- Ensure correct terminology when completing question. For example, answers to ultrasound, X-ray, CT or MRI images should use diagnostic imaging terminology rather than clinical descriptions unless otherwise stated
- Some slide questions supply HED forms that candidates are required to complete. Residents should ensure that they are familiar with HED examination and form-filling
- 20 sample slide questions on ECVO website

Practice:

- Clinical images
- Surgical techniques
- Diagnostic imaging
- Cytology
- Histopathology
- HED forms

Preparing for the practical

Practice with your mentor:

- Ordered, thorough clinical examination
- Cadaver surgery
 - Suturing, instrument and tissue handling
 - Adnexal techniques
- Eyeballs
 - ECCE, suture techniques

Why might a candidate fail?

Causes:

- Inadequate training programmes
 - Recognise any issues
 - Seek advice
 - ERC
 - Other mentors/programmes
 - o Externships
- Inadequate supervision
 - o More direct contact mentor/resident
 - Clinical examinations
 - Cadaver practice, wet labs, tying boards
 - Responsibility of the primary supervisor
- Individual personality/skills
 - Rigorous end of year 1 appraisal (shape up or ship out)
- The examination

- Inadequate preparation
- o Exam nerves
- Unfair examination procedure?
 - Practice
 - Stay calm
 - Keep to your plan

You will pass the practical exam if you

- Perform a thorough and organised clinical examination, identifying the majority of the significant lesions, and
- Surgically correct the adnexal defect described with an appropriate surgical procedure and the correct use of equipment/instruments/suture, with good tissue handling, and
- Perform intraocular surgery with an appropriate technique and the correct use of equipment/instruments/suture, with good tissue handling

You will lose marks (but not necessary fail) if you

Clinical exam:

- Perform a disordered clinical examination
- Don't use the examination equipment correctly
- Miss or misdiagnose abnormalities
- Don't compete the clinical examinations in time

Surgical exam:

- Perform an inappropriate surgical procedure
- Perform an appropriate procedure incorrectly
- Don't use magnification
- Use inappropriate magnification
- Use inappropriate instrumentation
- Display poor surgical technique (cutting, tissue handling, suturing)
- Fail to identify or acknowledge surgical mistakes
- Fail to correct (or describe how to correct) surgical mistakes
- Don't complete the surgical technique in time

Myth-busting

'They fail you outright if you...'

- Grasp needle with forceps and not needleholders
- Don't use tying forceps
- Hold scissors the wrong way
- Use dissolvable sutures
- Make a surgical mistake

'The Reading list changed two weeks before the exam' – this will not happen. 'You have to learn every single surgical procedure in Gelatt'.

Questions & Answers

Clinical examination – do we have to dilate the pupil?

• If we ask you to perform a full clinical examination then this should include this step, unless contra-indicated. If you feel it is appropriate then you should state you would like to do so

If you are doing an externship with an ACVO diplomate how do you record the case log and under whose name on the online form as space is limited?

• You would put the diplomates initials where you can but usually on the first page but if no space you should email Sabine Wacek who would address this for you.

Submitting the credentials for passing the boards at end of residency – I finished March 2017, should I then have to sit the exam in April 2020?

• Exam has to be within the first 3 years of completing the programme

What is the deadline to receive the letter of acceptance for publications?

• November but this can be difficult so there is a little flexibility

HED scheme, I have not seen one, is there an opportunity to access these forms

• Your mentor should have access

Confused with emails, which are no longer working

- It is just James Oliver's AHT email address that will no longer work as it is being phased out, all others are fine
- Pigs eyes are they going to be enucleated before or in a pigs head?
 - They will be enucleated eyes (NB other species may be used on occasion, depending on availability)

When is the next Gelatt being published?

• Towards the end of this year

When an eye has 2 corneal lacerations that require to be addressed separately does this count as 1 laceration or 2?

• It is unlikely to happen but the reviewers are likely to count this as 1 laceration

- With regards to laying out the table for our exam should you prepare for sterile surgery?
 - No but it should be neat and tidy

With regards to wearing glasses and using microscope is it acceptable to wear them?

• Yes

If the number of cases required drop in the Information Brochure does this get updated online automatically at source? There are some procedures done on cadavers the forms currently do not recognise?

- The new website should address all of this but if it does not add up you should make a note of this in your email explaining how you fulfil the criteria For the case log on specific species do we have to see our required number of patients in the last year or during the 3 year term?
- We like to see you have spread out your training over the 3 years but there is some flexibility.