AUSTRALIAN AND NEW ZEALAND COLLEGE OF VETERINARY SCIENTISTS

MEMBERSHIP GUIDELINES

Small Animal Dentistry and Oral Surgery

INTRODUCTION

These Membership Guidelines should be read in conjunction with the *Membership Candidate Handbook.*

ELIGIBILITY

Refer to the *Membership Candidate Handbook.*

OBJECTIVES

To demonstrate that the candidate has sufficient knowledge of and experience in Small Animal Dentistry and Oral Surgery to be able to give sound advice in this field to veterinary colleagues.

LEARNING OUTCOMES

The candidate is expected to be able to confidently apply the following knowledge to the diagnosis and treatment of diseases of the oral cavity:

A. A **sound**[1] knowledge of the basic principles of veterinary medicine and surgery.

B. A **sound** knowledge (dogs and cats), **sound** knowledge (lagomorphs and rodents) and **basic** knowledge (other animal including exotics) of:

[1]**Knowledge levels:**
Detailed knowledge — candidates must be able to demonstrate an in-depth knowledge of the topic including differing points of view and published literature. The highest level of knowledge.
Sound knowledge — candidate must know all of the principles of the topic including some of the finer detail, and be able to identify areas where opinions may diverge. A middle level of knowledge.
Basic knowledge — candidate must know the main points of the topic and the core literature

1. **Oral and Paradental Anatomy, Embryology, Physiology and Function**

The osseous, nervous, muscular and vascular anatomy, embryology, physiology and function of the oral cavity and related structures. **Basic** knowledge of comparative oral anatomy in mammals.

- Dental and periodontal anatomy, embryology, physiology and function, including an understanding of head shapes, dentition and occlusion.
- Sequence of tooth eruption and the significance of persistent deciduous teeth.

2. **Oral Disease**

The diagnosis and treatment of:

- Developmental and congenital abnormalities of the oral cavity including the dentition: Persistent deciduous teeth, abnormal number of teeth, gingival hyperplasia, odontogenic tumours and cysts.
- Acquired conditions of the oral cavity including stomatitis, gingivitis, periodontitis, periodontal abscess, dental caries, periapical abscess, eosinophilic granuloma and tooth resorption.
- Oral neoplasia.
- Immune mediated diseases of the oral cavity.
- Dental trauma.
- Metabolic and endocrine disorders that may affect the mouth.
- Diseases of other body systems that have oral manifestations or consequences, including viral, bacterial and fungal diseases.

3. **Dental Instrumentation**

- Range and use of hand and power instrumentation. The identification and indications for their uses in specific situations:
    - Periodontal instruments including, but not limited to periodontal probes, scalers and curettes.
    - Oral surgery instruments including, but not limited to, dental burrs, coupland chisels, extraction forceps, wedge elevators, luxators, root tip picks and periosteal elevators.
    - Ultrasonic scalers and the different types of air and electric scalers available.
    - Endodontic instrumentation.
    - Restorative instrumentation
    - Orthodontic wires, chains and brackets

4. **Oral Radiology**

- Extra and intra oral radiology.
- Use of screen film, non screen periapical and occlusal dental film, and digital sensors and technology
- Radiographic positioning techniques used in oral radiology including parallel and bisecting angle techniques
- Patient positioning for oral radiography
- Diagnosis of oral pathology and trauma from examination of oral radiographs.

5. **Oral Surgery**

- Indications for and techniques of tooth extraction
- Extraction of single and multi rooted teeth.
- Use of alveoloplasty, gingival flap procedures and the closure of oronasal fistulae.
- Fractures of the maxilla and mandible, their diagnosis and treatment.
- Repair of mandibular symphyseal separation
- Use of intra-oral acrylics in oral fracture repair as well as plates, screws, pins, wires and external fixators.
- Suture materials, suturing techniques, wound healing and factors affecting such.
- Repair of oronasal fistula (e).
- Management of luxated and avulsed teeth
- Use of implants (basic knowledge only)

6. **Restorative Dentistry**

- Composition of, indications for and use of dental amalgam, composite resin cements and glass ionomer cements.
- Cavity design and preparation.
- Impression materials and impression taking.
- Crown preparation and cementing techniques.
- Different types of crowns available, their uses and adaptations in veterinary dentistry.

7. **Orthodontics**

- Significance of brachygnathism and prognathism on the development of dental disease.
- Common malocclusions seen and their management.
- Ethical considerations when dealing with veterinary orthodontic procedures.
- Tooth movement and the forces required to move teeth.
- Use of active and passive orthodontic appliances.
- Impression materials and impression taking.

- Making of stone models and materials available.

8. **Endodontics**

- Aetiology and pathogenesis of pulpal pathology.
- The clinical signs and treatment of endodontic disease.
- Endodontic techniques such as direct and indirect pulp capping, coronal pulpectomy, complete pulpectomy, apexogenesis, apexification and apicoectomy.
- Endodontic emergencies, radiology, instrumentation, principles of treatment and materials
- Restorative techniques to close access following endodontic procedures.
- Reimplantation of avulsed teeth, stabilisation, follow up treatment and prognosis.

9. **Periodontal Disease**

- Aetiology, pathogenesis, symptoms, clinical signs, periodontal probing, dental charting, treatment planning.
- Periodontal therapy including probing, charting, oral radiography, supra and subgingival scaling, subgingival curettage, root planing, polishing and fluoride treatment and homecare advice and homecare products.
- Periodontal surgery including gingivoplasty, mucogingival surgery, apically repositioned flaps, odontoplasty and splinting, gingivectomy, palatal flaps, treatment of furcation involved teeth.

EXAMINATIONS

For information on both the standard and the format of the Written and Oral examinations, candidates are referred to the *Membership Candidate Handbook*. The Membership examination has **two separate, autonomous components:**

1. **Written Examination** *(Component 1)*
   Written Paper 1 (two hours): Principles of the Subject
   Written Paper 2 (two hours): Applied Aspects of the Subject

2. **Oral Examination** *(Component 2)*
   Oral (approximately one hour)

The written examination will comprise of two separate two-hour written papers taken on the same day. There will be an additional 15 minutes perusal time for each paper, during which no writing on the examination paper is permitted. In each paper you are provided with four (4) questions to answer, worth 30 marks each, giving a total of 120 marks per paper. There is no choice of questions. Questions may be long essay type or a series of shorter answer sub-questions or multi-choice five part choice questions. Marks allocated to each question and to each subsection of questions will be clearly indicated on the written paper.

Written Paper 1:

This paper is designed to test the Candidate's knowledge of the principles of Small Animal Dentistry and Oral Surgery as described in the Learning Outcomes using essay-style, short answer, note-point formats and multi-choice. Answers may cite specific examples where general principles apply, but should primarily address the theoretical basis underlying each example.

Written Paper 2:

This paper is designed to (a) test the Candidate's ability to apply the principles of Small Animal Dentistry and Oral Surgery to particular cases/problems or tasks and (b) test the Candidate's familiarity with the current practices and current issues that arise from activities within the discipline of Small Animal Dentistry and Oral Surgery in Australia and New Zealand using essay-style, short answer and note-point formats.

Oral Examination:

This examination requires the candidate to demonstrate achievement of the above mentioned Learning Outcomes. Discussion will be predominantly based on case material. The duration of this examination is approximately one (1) hour. Images and laboratory results are likely to be used during this examination. Ten (10) cases are presented with supporting questions asked verbally in a face-to-face setting. The oral examination has a total of 100 marks with each case allocated 10 marks.

RECOMMENDED READING MATERIAL

The candidate is expected to read widely within the discipline, paying particular attention to areas not part of their normal work experiences. This list of books and journals is intended to guide the candidate to some core references and other source material. Candidates also should be guided by their mentors. *The list is not comprehensive and is not intended as an indicator of the content of the examination.*

Texts:

Australian Veterinary Dental Society Annual Conference Proceedings 1990 - current

Bojrab, M.J. & Tholen, M. (1990) Small Animal Oral Medicine and Surgery. Lea & Febiger, Philadelphia.

Capello V and Gracis M Rabbit and Rodent Dentistry Handbook 2005

Carranza FA Jr and Newman MG 1996 Glickman's Clinical Periodontology 8th Ed., Saunders

Cohen S and Hargreaves K 2006 Pathways of the Pulp, 9th Ed, Mosby

Craig RG and Powers JM 2001 Dental Materials Properties and Manipulation. 11th ed, Mosby

Crossley, D.A. & Penman, S.. (1990) Manual of Small Animal Dentistry. British Small Animal Veterinary Association, UK.

Evans HE 1993 Miller's Anatomy of the Dog 3rd ed, Saunders

Gorrel, C., Penman, S, & Emily, P. (1993) Handbook of Small Animal Oral Emergencies. Pergamon Press, New York.

Harvey, C.E. & Emily. P.P. (1993). Small Animal Dentistry. Mosby, St Louis

Holmstrom, S.E., Frost, P. & Eisner, E.R. (1998) Veterinary Dental Techniques. 2nd Ed. Saunders, Philadelphia.

Kertez, P. (1993) A Colour Atlas of Veterinary Dentistry and Oral Surgery. Wolfe, London.

Malamed SF 1997 Handbook of local anesthesia 4th ed Mosby

Page RC and Shroeder HE Periodontitis in man and other animals: a comparative review 1982 Karger

The Post-Graduate Committee in Veterinary Science. Proceedings 100. (1987) Teeth – Open Wide. Sydney.

Profitt WR, Fields HW, Ackerman JL, Sinclair PM, Thomas PM and Tulloch JFC 1993 Contemporary Orthodontics 2nd ed. Mosby

Slatter D 1996 Textbook of small animal surgery 2 volumes 3rd ed. Saunders

Tutt Cedric 2007 Small Animal Dentistry: A Manual of Techniques Blackwell Publishing, London

Tutt C, Deeprose J and Crossley D. 2007 BSAVA Manual of Canine and Feline Dentistry 3rd Ed. Blackwell Publishing, London

Verstraete F 1999 Self Assessment Colour Review of Veterinary Dentistry Manson

Veterinary Clinics of North America. Small Animal Practice and Veterinary Dentistry.

Walton R.E. & Torabinejad M. (1995) Principles & Practice of Endodontics. 3rd edn. Saunders.

Conference proceedings, Veterinary Dental Forum, 1988-present

Wiggs. RB and Lobprise HB 1997 Veterinary Dentistry: Principles and Practice. Lippincott-Raven. Philadelphia.

Journals:

Australian Veterinary Journal
Australian Veterinary Practitioner
Compendium on Continuing Education for the Practicing Veterinarian
Journal of Veterinary Dentistry
New Zealand Veterinary Journal
Journal of Endodontics
Journal of Periodontology
Journal of Clinical Periodontology
American Journal of Veterinary Research
Journal of Small Animal Practice
Journal of the American Veterinary Medical Association
Journal of the American Animal Hospital Association
Seminars in Veterinary Medicine

FURTHER INFORMATION

For further information contact the College Office

Telephone: International +61 (07) 3423 2016

Fax: International +61 (07) 3423 2977

Email: admin@anzcvs.org.au

Web: www.anzcvs.org.au

Postal Address: Building 3, Garden City Office Park, 2404 Logan Road

EIGHT MILE PLAINS QLD 4113 Australia