

THE ROYAL COLLEGE OF VETERINARY SURGEONS
DIPLOMA IN SMALL ANIMAL SURGERY (SOFT TISSUE)

TUESDAY 8 JULY 2008

PAPER I
(3 hours)

- Candidates are required to answer **ALL EIGHTEEN** questions.
Allow 10 minutes per question.
- Please start the answer to each question on a separate sheet; failure to do so could lose you marks

Illegible handwriting or failure to answer the question in the form required may result in examiners being unable to award marks for information which candidates intended to convey.

1. Write **brief notes** on the clinical signs, diagnosis and surgical treatment of gall bladder mucocoeles in the dog.
2. Give **THREE** indications for digital subtraction angiography in the investigation of soft tissue surgery cases. **Briefly describe** the process of image acquisition and the advantages over conventional angiography.
3. What **differences** have been reported between cutaneous wound healing in the cat and dog?
4. **Describe** the Seldinger technique for central venous line placement. **List THREE** potential complications and **describe** how these can be avoided.
5. **Draw** a three chamber thoracic drainage bottle **using annotated labels** to describe its function. What are the advantages and disadvantages of this system?
6. **Describe with a diagram** the typical cardiopulmonary bypass circuit used in dogs.
7. Write **brief notes** comparing and contrasting gastrointestinal leiomyosarcoma and gastrointestinal stromal tumours in the dog.
8. **List** the hormonal effects of ovariectomy and indicate how these might affect urinary tract function in the bitch.

P.T.O. for Questions 9 - 18

9. **Briefly discuss** the advantages and disadvantages of using an Ameroid constrictor, with particular reference to how it may produce venous occlusion.
10. **Briefly describe** the technique of thoracoscopy in the management of canine lung tumours.
11. **List** the **FIVE** commonly described surgical techniques for managing gastric outflow disease together with the indications for and complications of the techniques described.
12. **Describe** how to manage a 0.5 cm basal cell carcinoma centred on the right upper canine. What is the prognosis following complete resection? How might your approach to this case differ if the mass was a fibrosarcoma?
13. In addition to an insulinoma what tumours affect the pancreas? What further test would you perform on a dog with recurrent weakness, muscle tremors and ataxia proceeding to seizures? What is Whipple's triad? What structure must you preserve when dissecting the right limb of the pancreas? What is the median survival time reported following partial pancreatectomy for an insulinoma?
14. **List** the potential causes of metabolic acidosis. How should metabolic acidosis be managed? In a dog with clinically confirmed metabolic acidosis how would you raise the pH above 7.2? How can an estimate of base deficit be made?
15. **Draw and label** the external and internal inguinal rings of the dog. What is the reported incidence of congenital inguinal hernias in the dog? Which breeds are predisposed to this condition? What is the difference between a direct and indirect inguinal hernia in the male dog? What complications may occur as a result of an indirect inguinal hernia?
16. **List** the indications for feline tracheostomies. What are the reported complications of tracheostomies in cats? What is the likely survival time at home with a permanent tracheostomy?
17. Following bilateral anal saccullectomy a 7 year-old Dachshund develops a rectocutaneous fistula. **Describe** the options you would consider, and how you would carry them out, in managing this case. In **each** instance describe how you would deal with recurrence of the rectocutaneous fistula.
18. What options are available for repairing feline oronasal fistulae? A recent paper described a novel treatment of chronic feline oronasal fistulae. What was used in

this series? What did the authors suggest was the reason for the success in their retrospective study? What initial treatment do the authors recommend for repair of small chronic defects?

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TUESDAY 8 JULY 2008

PAPER II
(3 hours)

Candidates are required to answer **FOUR** of the following **five** questions.

Allow 45 minutes per question.

Please start the answer to each question on a separate sheet; failure to do so could lose you marks.

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1. **Discuss** the statement: *“Cytokine messaging can be described as the key that unlocks the mystery to understanding wound healing”*.
 2. Reconstruction of large tissue defects of distal extremities or oral wounds can be challenging. The use of free tissue transfer can be used in the management of such cases. **Discuss** the use of free tissue transfer in canine and feline wound reconstruction.
 3. *“Hospital Acquired Infections should be a source of concern for all soft tissue surgeons.”* **Discuss** this statement detailing how and why patients undergoing soft tissue surgical procedures are at risk and what management strategies can be employed to reduce risk.
 4. What is systemic inflammatory response syndrome (SIRS) and why is it important to the soft tissue surgeon and how would you manage it?
 5. **Describe in detail (using diagrams)** the techniques that have been described to reimplant ureters into the bladder in the dog and cat. What are reported advantages and disadvantages of the various techniques?
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THE ROYAL COLLEGE OF VETERINARY SURGEONS
DIPLOMA IN SMALL ANIMAL SURGERY (SOFT TISSUE)
THURSDAY 17 JULY 2003

PAPER I
(3 hours)

Candidates are required to answer **ALL EIGHTEEN** questions.

Allow 10 minutes per question.

Please start the answer to each question on a separate sheet; failure to do so could lose you marks

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1. **List** the indications for cholecystoenterostomy in small animals. What are the potential long-term complications of these procedures? What strategies, if any, have been used in human surgical practice to prevent complications following cholecystoenterostomy?
2. **Briefly** describe the effect and mechanism of action of ketoconazole in the alteration of cyclosporin dosage in dogs?
3. Compare and contrast open peritoneal drainage versus primary closure for the treatment of septic peritonitis in dogs and cats.
4. What are the current recommendations for the surgical treatment of brachycephalic airway disease? What literature exists to justify these recommendations?

P.T.O. for Questions 5 - 12

5. Describe the effects of recombinant growth hormone on second intention wound healing.
6. **List** the reported causes of urethral prolapse in the male dog. Describe the techniques that have been described for the surgical management of this condition.
7. **List** the techniques that have been investigated experimentally or clinically that allow resection of the urinary bladder but salvage of the remainder of the urinary tract. What complications have been common to these salvage attempts? Have any complications been unique to any specific technique(s)?
8. **Briefly** discuss whether percutaneous gastrostomy is a valid means of achieving permanent gastropexy.
9. Describe the techniques that may be used to perform anal sacculotomy for treatment of non-neoplastic anal sac disease in the dog. What are the reported complications of anal sacculotomy and is any surgical technique reported to carry a greater risk of complication?
10. **List** the historical, physical examination, and diagnostic imaging features of isolated splenic torsion. Briefly explain the key elements of rational surgical management of a stable patient with isolated torsion of the splenic pedicle.
11. How can molecular techniques be used to assess metastatic oral tumours in the dog?
12. What do you understand by the term 'vestibulovaginal stenosis' in the bitch? What is the reported influence of this condition on response to treatment for clinical signs of lower urinary tract disease in dogs?

P.T.O. for Questions 13 - 18

13. Describe the reported incidence, clinical history and findings associated with oropharyngeal penetration injuries in the dog. What effect is the time of presentation thought to have on the resolution of the clinical signs following surgical intervention?
 14. **Briefly** compare the use of skin staples with suturing for performing experimental end-to-end jejunal anastomosis in the dog.
 15. What are the three most common primary lung tumours reported in the cat? What are the prognostic factors for survival in cats after removal of a primary lung tumour? How do the benefits of surgical excision for cats with a primary lung tumour compare to those documented in the dog?
 16. **List** the potential complications of microvascular free flap transfer in the dog. **List** methods of assessing flap viability post operatively. What is regarded as the most important factor in potential flap failure?
 17. What are the pathologic characteristics of the horizontal ear canal that have been reported in Cocker Spaniels with chronic severe otitis externa? What effects, if any, are these changes considered to have on the progression and management of otitis externa in this breed?
 18. What are the more recent changes to our understanding of the pathophysiology of flail chest? What significance have these changes had on the reported management of this condition in the dog and cat?
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THURSDAY 17 JULY 2003

PAPER II
(3 hours)

Candidates are required to answer **FOUR** of the following **five** questions.

Allow 45 minutes per question.

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1. Compare and contrast the use of skin flaps in small animals with skin flaps and fasciocutaneous flaps in humans.
 2. What problems have been identified during the first decade of clinical renal transplantation in the cat? How has the identification of these problems influenced patient selection, surgical protocol and post operative management regimes?
 3. An eight year-old neutered male Staffordshire bull terrier is presented to you for the investigation and management of a rapidly growing 2 cm diameter subcutaneous mass associated with the lateral aspect of the elbow. Previous core biopsy results suggest the mass is an intermediate grade mast cell tumour. Describe your approach to the further investigation and management of this case. How would a core biopsy result suggestive of a high grade mast cell tumour change your approach to the management of the case?

4. Discuss why intestinal ischaemia may lead to systemic inflammatory response syndrome (SIRS).

 5. Review the techniques that have been suggested for the treatment of chylothorax in the dog and cat. What are your current recommendations to owners of a dog with this disease and why?
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THE ROYAL COLLEGE OF VETERINARY SURGEONS
DIPLOMA IN SMALL ANIMAL SURGERY (SOFT TISSUE)

Tuesday 22 August 2000
PAPER 1

THREE HOURS

Candidates are required to answer **ALL** questions.

Please start the answer to each question on a separate sheet; failure to do so could lose you marks

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1. What are the indications/contraindications for the use of surgical stapling devices in small animal alimentary tract surgery?
2. List the possible symptoms and methods of diagnosis of phaeochromocytoma. Why is treatment of this condition difficult?
3. What are the advantages and disadvantages of computed tomography (CT) and magnetic resonance imaging (MRI) for use in the investigation of nasal disease in small animals.
4. Write brief notes on the use of Iris- ethylene-diamine tetra-acetic acid (IrisEDIA) in the management of wounds in small animals.
5. What are the electromyographic characteristics of motor nerve transection? What tests would you use to differentiate muscle and motor nerve disease? At what rate do peripheral nerves regenerate?

6. List the differences in the anatomy of the middle ear of the dog and cat.
7. Give four causes of hypercalcaemia. What clinical signs might be associated with hypercalcaemia? What treatments can be used to reduce blood calcium concentrations?
8. List the indications for lateral wall resection, vertical canal ablation and vertical canal ablation plus lateral bulla osteotomy. What are the possible complications of bulla osteotomy?
9. List the methods available for the assessment of bleeding tendencies in small animals. For each method, state which clotting pathway is assessed and the clinical relevance of the test.
10. List the reported surgical procedures for the management of tracheal collapse in small animals. State the reported complications of each technique.
11. Briefly describe the methods available for the assessment of pulmonary function in small animals.
12. What are the signs of vestibular disease in small animals? How would you differentiate central from peripheral vestibular disease? To which direction is the slow phase of nystagmus in peripheral vestibular disturbance?
13. List the symptoms and clinical signs associated with gastrinoma. What diagnostic tests would you use to confirm the diagnosis? What treatment methods are available?
14. Describe, using diagrams, how 'nasal droop' can be prevented following rostral maxillectomy.

15. Which haematological and biochemical abnormalities can be used to predict gastric necrosis in dogs with gastric dilation and volvulus (GDV) ? List five reported risk factors for the disease.
 16. Using diagrams, elucidate the differences between cat and dog ureterovesical junctions. What implications do these have for re-implantation of ectopic ureters?
 17. Briefly describe the instrumentation required and general method for performing laparoscopy in small animals.
 18. Compare and contrast axial pattern, transposition and interpolation flaps.
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THE ROYAL COLLEGE OF VETERINARY SURGEONS
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Tuesday 22 August 2000

PAPER 2

THREE HOURS

Candidates are required to answer FOUR questions.

Candidates will be expected to critically discuss published data where relevant.

Please start the answer to each question on a separate sheet; failure to do so could lose you marks

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1. Discuss the potential physiological causes, investigative tests and management options for hypoxia in a dog that has undergone thoracotomy for lung lobectomy.
2. Describe your approach to the management of a large soft tissue sarcoma in the periorbital region of a rottweiler. What impact does radical surgery have on life expectancy of animals affected by soft tissue sarcoma?
3. 'The inappropriate use of antibiotics in small animal surgery is leading to development of highly resistant strains of pathogenic bacteria'. Discuss this statement.
4. What is ischaemia-reperfusion injury ? Using examples, discuss its importance in small animal soft tissue surgery, its pathophysiology and methods to modify its effects.
5. Review the surgical techniques described to treat urethral sphincter mechanism incompetence in the bitch.

ROYAL COLLEGE OF VETERINARY SURGEONS
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Tuesday 24 August 1999

PAPER II (There is no Paper I)

2.00pm to 5.00pm (3 hours)

Candidates are required to answer four questions.

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1. Discuss the aetiologies, pathophysiology, clinical management, and reported outcomes for septic peritonitis.
2. Discuss the uses of colloids and crystalloids in fluid resuscitation of the trauma patient in decompensatory shock. Comment on the relative advantages and disadvantages of specific fluid choices.
3. Explain why the techniques available for replacement and reconstruction of skin deficits in small animals differ from those available for the treatment of human patients?
4. Discuss the role of surgery in the management of cancer. To what extent is conventional tumour surgery likely to be replaced by other modalities?
5. Describe how our understanding and management of portal vein anomalies has evolved over the past decade.

ROYAL COLLEGE OF VETERINARY SURGEONS
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Tuesday 19 August 1997

PAPER 2 (There is no Paper 1)

Afternoon
(3 hours)

Candidates are required to answer FOUR questions

Illegible handwriting or failure to answer the question in the form requested may result in examiners being unable to award marks for information which candidates intended to convey

1. Describe the anatomy and physiology of the omentum in dogs and cats. Discuss its uses, described and potential, in small animal surgery.
2. Why is gastric dilatation-volvulus in the dog such an emergency?
3. Critically discuss the techniques available for investigation of urinary incontinence in small animals.

Indicate how they can be used to select appropriate therapy, predict outcome and analyse results.
4. Discuss the current approaches to management of tumours involving the respiratory system.
5. Is organ transplantation a viable and desirable goal for small animal soft tissue surgery?

ROYAL COLLEGE OF VETERINARY SURGEONS
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Wednesday 21 August 1996

PAPER II (There is no Paper I)

2.00pm to 5.00pm (3 hours)

Candidates must attempt **four** questions.

Illegible handwriting or failure to answer the question in the form requested may result in examiners being unable to award marks for information which candidates intended to convey.

1. Discuss how the surgical management of gastrointestinal diseases in small animals has been influenced by our improving understanding of relevant physiology and pathophysiology.
2. 'An ideal technique for the reconstruction of skin deficits involving the extremities of small animals has yet to be reported'. Discuss this statement.
3. Discuss the problems inherent in the diagnosis and the selection of treatment for diseases involving the auditory apparatus in small animals.
4. Describe the response of the peritoneum to disease.
5. Discuss the maintenance of blood oxygen tension levels in patients undergoing surgery of the respiratory tract.