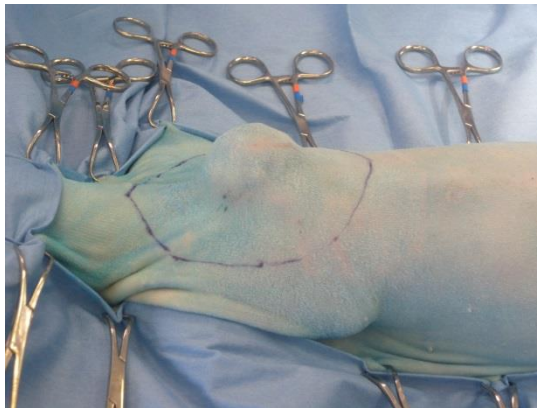


Certificate in Advanced Veterinary Practice

C-SAS.2 Small Animal Surgery

Soft Tissue Surgery A

Module Outline



Module Leader:

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European Specialist in Small Animal Surgery**

Enrolment guidance

This module is one of a range of C modules covering Small Animal Surgery, and is the first of two modules covering Soft Tissue Surgery. The aim of the module is to enable you to extend and consolidate clinical knowledge and skills gained at undergraduate level, and to develop an in-depth understanding of the application of that knowledge in a practice environment in relation to Soft Tissue Surgery in the areas as outlined below.

You must fulfil the following criteria:

- a) You should have completed module B-SAP.1.
- b) If you are only enrolling for the C surgery modules with RVC, it is **highly recommended** that you complete the assessment task relevant to surgical principles in module B-SAP.1. This will be reviewed by the assessors prior to assessment of any C module work. If you have completed the B-SAP.1 module at another institution, your surgery report may be submitted for feedback.
- c) You are **strongly recommended** to take the 'core' Surgery module – Small Animal Surgical Practice (C-SAS.1) – before attempting this module. Whilst this module may be taken as a free-standing module, it assumes a sound understanding of the principles covered within C-SAS.1.
- d) It is your responsibility to ensure that you have access to sufficient surgical cases to produce adequate material for the module.
- e) It is your responsibility to be aware of the limitations of your facilities to carry out surgical techniques that might be taught in the course of this module.

Coverage of this module may be integrated with others, particularly other B and C modules. You will normally have completed A-FAVP.1 Foundations in Advanced Veterinary Practice module and at least one of the practice B modules, before undertaking a C module, although you can choose to work through modules in a different order if you wish. In whichever order modules are tackled, compliance with best practice for all the topics covered by module A-FAVP.1 will be expected whenever these are appropriate in C modules. For example, awareness of, and compliance with, all relevant legislation, welfare and ethical principles will be required throughout.

This module is one of a range of C modules covering Small Animal Surgery; the aim of the module is to enable you to extend and consolidate clinical knowledge and skills gained at undergraduate level, and to develop an in-depth understanding of the application of that knowledge in a practice environment.

You are advised to plan a structured programme of continuing professional development to help you achieve your objectives. Involvement in 'learning sets' and networks of other candidates working towards the same or similar modules is encouraged; this could be initiated by the candidates

themselves via RVC Learn. The RCVS considers that candidates will need advisers/mentors to support them through the programme. You are free to choose your own advisers/mentors and the RCVS guidelines strongly advise you to seek advice from your mentor regarding 'seeing practice' with specialist surgeons.

For a designated Certificate in Advanced Veterinary Practice (General Small Animal Surgery) you must complete this module, the C-SAS.1 Core module, a third surgery module, a fourth 10 credit module of your choice and an RCVS synoptic assessment.

Learning outcomes

At the end of the module, candidates should be able to:

- Thoroughly understand the anatomical, physiological, immunological and pathological processes involved in specific surgical diseases, including the relationships between the condition, surgical technique and the overall health status of the patient
- Show thorough familiarity with the clinical presentation of the common surgical conditions affecting dogs, cats and other small mammals
- Understand and promote the diagnostic processes necessary prior to embarking on a surgical procedure
- Review and constructively criticise current literature on the soft tissue surgery, to enable them to determine its relevance to their current practice
- Utilise their understanding of Evidence Based Medicine and Decision Analysis to develop practical diagnostic and treatment protocols for their patients
- Use available resources and communicate with owners in such a way as to achieve optimum results in their practice circumstances in relation to surgical cases
- Review the outcomes of at least part of their clinical work, using the process of clinical audit to improve performance
- Recognise when a case is truly unusual, and become familiar with the information resources available to enable them to deal with such cases
- Recognise when a case is beyond their personal or practice capabilities, and provide an effective channel of referral

Learning topics

The syllabus is divided into sections based on anatomical location. A series of surgical procedures is listed in each section. Candidates will be expected to become familiar with the following categories of information for each surgical procedure:

- Signalment, clinical signs, differential diagnosis
- Pathophysiology of the condition
- Appropriate investigative techniques
- Options for surgical management of the disease
- Anatomy, procedures and techniques
- Special issues regarding theatre practice or aseptic technique
- Prognosis and outcomes
- Complications

Surgical procedures

All surgical procedures listed in the syllabus are categorised in terms of difficulty as A, B or C. The rationale for this is that there are clearly some surgical procedures that candidates studying for this module would be expected to fully competent (category A). Other more challenging procedures are grouped in category B which, by the time the module has been completed, the candidate may be expected to perform competently. Category C procedures are those advanced techniques which are usually performed by surgeons with significant post graduate training and experience, and candidates will not be expected to demonstrate experience or competence in these techniques. However, candidates will be expected to have an understanding of the full range of techniques in terms of indications, diagnosis, complications and prognosis, sufficient to be able to advise referral where appropriate.

Skin

Advancement flaps - A
Bipedicle and transposition flaps – B
Free skin grafts – B
Axial pattern flaps – B/C
Wound augmentation with omentum – B
Microvascular techniques – C
Muscle flaps – C
Myocutaneous flaps – C
Compound flaps – C
Mastectomy
- Simple – A
- Radical – B
Resection for skin fold pyoderma – A
Screw tail resections – B

Aural

Aural haematoma – A
Lateral wall resection – A/B
Pinnectomy – A
Total ear canal ablation with lateral bulla osteotomy – B/C
Para-aural abscessation – C
Ventral bulla osteotomy – B/C

Nasal

Nasal planum resection
- cat - B
- dog - C
Dorsal rhinotomy – B/C
Ventral rhinotomy – C

Trephination of sinuses and treatment of aspergillosis – B

Oral

Cleft palate repair

- Soft palate – B/C
- Hard palate – C
- Hare lip – C

Rostral mandibulectomy – B

Horizontal mandibulectomy – C

Total mandibulectomy – C

Rostral maxillectomy – B

Caudal maxillectomy - C

Radical naso-maxillectomy – C

Partial glossectomy – B/C

Sialoadenectomy – B

Airway and thorax

Stenotic nares – A

Soft palate resection – B

Excision of everted laryngeal ventricles – B

Tonsillectomy – B

Unilateral arytenoid lateralisation – B/C

Tracheoplasty for tracheal collapse – C

Tracheal resection and anastomosis – C

Tracheal avulsion – C

Chest tube placement and management – A/B

Lung lobectomy – B/C

Lung biopsy – C

Thoracic duct ligation – C

Thoracic omentalisation – C

Pericardectomy – B/C

Lateral thoracotomy – B

Median sternotomy – C

Chest wall reconstruction – C

Ligation of a patent ductus arteriosus – C

Surgical management of a vascular ring anomaly – B/C

Thymectomy – C

Endoscopic soft tissue surgery

Instrumentation and principles

Thoracoscopy – C

Laparoscopy – C

Oncologic surgery Principles of oncologic surgery - A
Staging of oncologic patients - A
Skin tumours – A/B
Radical resections - C

Assessment

- A case diary of 20 surgical cases relating to the subject matter covered under Small Animal Soft Tissue Surgery A should be submitted. These cases can be taken from the 100 consecutive surgical cases submitted as part of the Small Animal Surgery (Core) module.
- A 1,500 word synopsis to accompany the case diary will enable you to review the improvement in your practise while accumulating these cases. This might include what has changed in your approach to a case, any new procedures or investigations that are now considered, any additional reading which was helpful, and/or any unexpected features of a case which will influence decision making in the future.
- You should then select up to 5 cases you wish to expand on, with a paragraph per case stating your reason for each choice. Each case must have complete case history and follow up, including, where applicable, laboratory results and pre- and postoperative imaging. The assessor will select 2 cases to be written up by you. You must be primary surgeon for all 5 cases.
- Two cases to be written up in detail up to 2,000 words in length with appropriate illustrations. The discussion in these two case reports will critically appraise the case management and demonstrate your ability to apply the learning outcomes to the management of cases in your practice. **The discussion should be very specific to the surgical case.** It should be based around discussing what went well and what went badly with the surgery. The discussion should also critically review the wider literature relating to the surgery case. In some cases this may involve discussing alternative treatment/management options based on the current literature. Proper and appropriate referencing is expected. A useful guideline is that the discussion should comprise approximately half of the word limit (i.e. 1,000 words).
- One case report can be submitted for review prior to being marked. This is only permitted once per candidate per discipline. It must be submitted as a fully written report and not a draft version. Feedback will be given on the approach to writing the case report that can be applied to all future surgery reports and modules, rather than specific comments on management of the individual case.
- A one hour examination to consist of 10 short answer questions relating to the subject matter covered under Small Animal Soft Tissue Surgery A and an assumed knowledge of surgical core principles.

Assessment weighting

- Case diary with synopsis 10%
- Case reports 60%
- Exam 30%

Annual assessment timetable

1st September	Please inform the CertAVP office if you are intending on submitting work in October
1st October	Case diaries and synopsis to be submitted and accompanying this should be a separate document with the choices of 5 cases you wishes to expand on.
16th November	You will be notified of your case diary and synopsis results. If successful, you will be notified of which 2 cases are to be written as case reports
15th January	You are given the opportunity to have one case report per discipline reviewed prior to marking (therefore only one for all Surgery modules). Please submit your report by this date if you haven't already had a review.
22nd February	Case report feedback returned to you
1st April	Two case reports to be submitted
15th June	You will be notified of your case report results
Early July	Written examination to be held (date to be confirmed)
9th September	You will be notified of your exam result and module pass

Learning support

Learning support is provided to aid self-directed learning and to provide easy access to published articles. You will be given a username and password which will allow you to log on to 4 different systems:

1. RVC Learn (<http://learn.rvc.ac.uk/>)

- Sample reports for each surgery module
- Practice exam questions
- A very helpful webinar to guide you through the assessment requirements
- Interesting articles to read
- Access to presentations from the CertAVP Survival Tips day
- Discussion boards between other candidates enrolled on the module and with surgery tutors
- Guidelines for mentors
- Access to SCOUT, RVC's solution for the discovery and delivery of resources including books, ebooks, journal articles and digital objects, all in one single search. Log in to SCOUT using your RVC username and password to save items on your eshelf. If you are able to use the library in person, you can borrow a book for one week with photo ID. IT and Library support is available for this facility (email library@rvc.ac.uk or helpdesk@rvc.ac.uk).

2. RVC Intranet (<https://intranet.rvc.ac.uk>)

Access to all information available to all RVC students and employees, for example, news, events, policies, committees, services, Library, IT helpdesk, etc.

3. Athens (<http://www.openathens.net/>)

A huge amount of any library's information is now available online, e.g. electronic journals, e-books and databases. 'Athens' is a system used by UK universities for controlling access to these type of online services and with your username and password, you can access many of a library's online databases, electronic journals and e-books seamlessly.

4. Email (<http://mail.rvc.ac.uk/>)

You are given an RVC email address, which is compulsory to use for CertAVP communication and submission of work.

Case diary guidelines

- Each piece of work you submit must be anonymous; please contact the CertAVP office for your student number. Please save and name your case diary, synopsis and case selection documents like this:
 - **CSAS2 Student number – Case diary**
 - **CSAS2 Student number – Synopsis**
 - **CSAS2 Student number – Case selection**
- The case diary should be written in Excel, and the synopsis and case selection should be in Word. The email address you send the work from does not need to remain anonymous.
- Include a variety of surgeries from as many of the surgical categories listed for this module (for C-SAS.2 this includes skin, aural, nasal, oral, airway, thorax and oncological surgeries). To maintain this variety, please stop including surgeries of a specific type once you have already included 2 or 3 that are the same procedure.
- No more than 10% (2 cases) should list you as the assistant (second) surgeon. In cases where you are the primary surgeon but someone else is listed as an assistant surgeon please clarify in the synopsis who they are (e.g. nurse, colleague, mentor) and whether they are simply assisting with retraction and passing of instruments or to what extent they were involved in performing the surgery.
- Cases can be collected from up to 12 months prior to the date of enrolment on the CertAVP programme.
- Make sure you only include cases that relate to the syllabus content for the module, which VARY for each module. C-SAS.2 includes skin, aural, nasal, oral, airway, thorax and oncological surgeries (see above section on surgical procedures).
- Specifics are needed e.g. for masses, state size and location, as well as the cms of lateral margins and type of deep margins achieved at surgery.
- Up to 10% (2 cases) of the diary may include minimally invasive surgeries (laparoscopy/thoracoscopy) except for routine neutering which is excluded.
- Do not include simple/small “lumpectomies” or lipoma removal, diathermy excision of gingival epulides, subcutaneous/cutaneous excision of other small/simple/benign lesions.
- Do not include the following in any C module (including C-SAS.2) case diaries:

- Routine neutering procedures
 - Routine dew claw removal
 - Routine uncomplicated/small umbilical hernias corrected at the same time as neutering
 - Chest drains
 - Skin biopsies
 - Lance abscess
 - Critical care procedures e.g. O-tube placement
 - Simple wedge biopsies from masses
 - Suturing of small or simple skin wounds
- You may use well-known abbreviations as long as these are explained in an appendix.

Case diary synopsis

A 1,500 word synopsis essay is required to accompany the case diary. This synopsis might include:

- discussion of what might have changed in your approach to a new case
- any new procedures or investigations that are now considered during case investigations
- any unexpected features of a case which might influence decision making or case management in the future
- discuss whether there has been any impact on you and your team for future practice and learning
- any additional reading which was helpful

This is a good opportunity to explain or clarify any aspects of your case diary to the examiner and to state any plans you have for future study. Wherever appropriate use your further reading and available evidence to support any statements that you make. Examples of reflective essays are provided on Learn although please note that there is not a specific format that must be followed. You must stay within the word limit given or the work will be returned unmarked.

Example of C-SAS.1 case diary (same principles apply to C-SAS.3)

Number	Date	Case number	Species, breed, age, sex	Clinical signs	Diagnosis	Surgical procedure	Post-op care and outcome	Primary or assistant	Complications
1	2/09/02	00001	Domestic short hair (DSH) 10y10m Male (M) Neutered (N)	Wound present in axilla after cat missing for several days.	Non healing wound in axilla, 5cm diameter	Complete surgical excision of wound bed and primary closure	Buster collar to prevent licking, kennel rest for 1 week.	Primary	Breakdown of distal third of wound. Debrided and lavaged under general anaesthetic (GA) and left open to heal by second intention. Broad spectrum oral antibiotics prescribed for 7 days.
2	2/09/02	00002	Crossbreed dog, 10yrs, Female (F) entire (E)	Mass palpable in left mammary gland, of 2 weeks' duration	4 x 4cm mammary carcinoma in gland 3 on left side	Complete surgical excision with 1cm lateral margins and to the depth of subcutaneous tissue.	Buster collar to prevent licking, strict rest until suture removal. Good outcome (no recurrence at 6 months).	Primary	Serosanguinous wound discharge post-op. Resolved with Primapore dressing and 5 day course of broadspectrum oral antibiotics

3	3/09/02	00003	Hamiltonstovare 3y4m, ME	Slow growing mass of right thigh, present for 3 months, not adherent to underlying structures	4 x 4cm Fibrosarcoma on fascia of lateral right thigh	Complete surgical excision performed with 3cm lateral margins and depth that included the underlying fascia and a 0.5cm section of the musculature on the crus. Primary closure, no reconstruction necessary.	Buster collar to prevent licking, primapore dressing placed for first 3 days, good outcome	Assistant	Inflamed wound, resolved following suture removal
4	2/09/02	00004	Cavalier King Charles Spaniel 11m, MN	Intermittent skipping lameness of right hind leg of 2 months' duration, pain in stifle, patella easily luxated medially, no cranial drawer	Medial Patella luxation, Grade II	Wedge sulcoplasty, lateral tibial transposition secured with 1.6mm K-wire , lateral imbrication, medial joint capsule release	2 weeks rest then increasing amounts of lead exercise. Good outcome	Primary	None
5	3/09/02	00005	Crossbred 3y10m, FE	4/10 left hindlimb lameness of 4-weeks' duration , stifle thickened and painful, positive cranial drawer	Cranial cruciate ligament rupture	Extra-capsular stabilisation using two strands of 100lb nylon between fabella and tibia secured with metal crimps. No meniscal damage.	Short lead walks 6 weeks. Referral to veterinary physiotherapist. Good outcome	Primary	None

Case report guidelines

Each case report you submit must be anonymous; use the student number given to you for your case diary. Please save and name your case reports like this:

CSAS2 Student number – Case report review

CSAS2 Student number – Case report 1

CSAS2 Student number – Case report 2

The case reports should be in Word and the email address you send the work from does not need to remain anonymous. The content of reports must also be anonymous, e.g. removing practice details from discharge notes.

Please ensure that the beginning of your case report includes:

1. your student number
2. module name
3. title
4. word count (excluding the above, tables, photo titles and references)

Each case report is to be written up in detail up to 2,000 words in length with appropriate illustrations. Photographic illustrations of procedures must be clear, unambiguous and labelled to enable orientation for the reviewer. All tables, figures, photographs and radiographs must be accompanied by a figure legend, which is referred to in the main text in brackets, e.g. (Figure 1), but interpretation must be included within the body of the text and is included in the word count. For radiographs lateral views of any part should be orientated with the cranial or rostral part to the viewer's left. Ventrodorsal and dorsoventral images should be viewed with the left side on the viewer's right. Images of the distal limbs should have the proximal portion at the top of the image. Lateral and medial should be consistent throughout the report. For ultrasound images cranial should be to the left with ventral surface at the top of the image. Please ensure digital images are submitted in a compressed format so that they can be easily transferred via e-mail. Images are not essential to pass a case report but they increase the quality of the report.

The case report should be written in the third person in a style suitable for publication in a Journal (for example Journal of Small Animal Practice). You are expected to demonstrate a high standard of literacy and please ensure that any spelling and grammatical errors have been corrected.

The following frame work should be used as a guide to the structure of the case report:

- Identification of patient
- History
- Clinical signs
- Problem list and differential diagnoses

- Investigation
- Diagnosis
- Treatment (including postoperative care/instructions)
- Follow up
- Result
- Discussion
- References
- Appendices (optional)

References:

- These should be properly cited in the text, in accordance with the style in the Journal of Small Animal Practice (JSAP). Avoided listing references that were not cited in the text or vice versa.
- We recommend using Harvard referencing as described by the Anglia-Ruskin University (<http://libweb.anglia.ac.uk/referencing/harvard.htm>).
- You will find it very helpful to use a program such as Endnote® or Reference manager® to organise your references.

Appendices:

- You may include appendices to provide laboratory reports or other information that you may wish the examiner to have access to but please note that the examiners are not obliged to read them (so please don't include essential case information).
- The appendices may not be used to provide additional information that should be within the case report e.g. justification for use of antibiotics. Any such information will not be marked and will not contribute to the overall grade.
- Images may be included here or in the main body of text. Include any images that you think are relevant as these generally enhance your report and enable examiners to assess your interpretation. Normal ultrasound images need not be included unless you would like to do so but clear abnormal images should be included if possible. Radiographs must be interpreted within the text of the case report and not as part of the figure legends or within the appendices.
- Laboratory reports may be included here but all abnormalities need to be written in the text and reference ranges must be included. All laboratory results should be interpreted appropriately within the text of the case report and not within the appendices.
- It is acceptable to scan printed reports rather than re-type them if you prefer, but any case details or details of your name or practice must be blanked out.

The word limit is 2,000 words per case report. Tables, figure legends (including descriptions of radiographs), appendices and reference list are NOT included in the word count. The report title and titles within the report ARE included. You should not put important information, such as the physical

examination, in to a table to avoid the word count; only numerical data should appear within a table (such as laboratory results). In the interests of fairness to all candidates the word count is adhered to strictly and reports that exceed it will be returned unmarked.

All written work submitted to the Royal Veterinary College is passed through plagiarism detection software. Work submitted for this module should not have been submitted for any other courses at RVC or other institutions.

Mentors

Candidates who study for the CertAVP surgery C modules with the Royal Veterinary College are advised to find a mentor who can guide them. Finding a mentor and maintaining appropriate and regular contact are the responsibility of the candidate, and mentors operate on a goodwill basis only. Mentors are usually either holders of the RCVS CertSAS or RCVS CertAVP qualifications or holders of American, European or RCVS Diploma qualifications. Ideally mentors will have some experience of teaching and examining at either undergraduate or post-graduate level. Members of the RVC Small Animal Surgery department cannot act as mentors as they are involved in setting and marking the assessed work. We recommend that an individual mentor does not take on more than 5 CertAVP candidates if possible.

We consider that the role of a mentor should/may include:

- Becoming familiar with the module outlines that are supplied to candidates.
- Encouraging candidates to undertake continuing professional development and to 'see practice' at a relevant centre/s appropriate to their strengths and weaknesses.
- Encourage candidates to join relevant societies and associations and attend meetings where appropriate.
- Guide candidates on the level and amount of reading that they should be doing during their period of study. There is a reading list for each C-SAS module which can be used as a framework.
- Encourage candidates to plan their time carefully for logging cases, writing case reports and essays, reading and exam preparation. A reminder of good examination technique may also be useful for some candidates.
- Encourage candidates to get support from other CertAVP candidates either through the RVC learning support discussion forums or by other means.

What is the mentor's role regarding submitted work?

We consider that a mentor can give general advice on preparation of a case diary and selection of cases for writing up into full length reports. Unlike the previous RCVS CertSAS we do not recommend that mentors read any of the case reports in detail and/or give detailed written advice. However, one read through of one case report and some general feedback (ideally verbally) is acceptable. Please notify the CertAVP office when you have a mentor as there is a Mentor Guidance document that is provided to them.

Recommended reading list

The following list is given as a guide as to where to start and for this reason cannot be considered 'complete'. We also don't expect you to read texts from cover to cover or to use all of the texts listed, however we do recommend you make use of the most recent edition of textbooks where available. We apologise if you feel a particular favourite is missing - feel free to use the Learn discussion board to pass on additional suggestions to other candidates.

- Small Animal Surgery: Ed. Fossum. W.B. Saunders
- Veterinary Small Animal Surgery, Volumes 1 and 2: Ed. Tobias and Johnston, Elsevier Saunders
- Compendium of Continuing Education
- Journal of Small Animal Practice
- Veterinary Surgery