AVSTS Research Cooperative (ARC) application form

Project title:

Outcome of caudal auricular axial pattern flaps used to close skin defects involving the head in dogs: ____ cases (2005-201?)

Name and work address of provisional first author: *must be AVSTS member*

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Name(s) of provisional co-authors: *do not need to be AVSTS members.*

To be determined

Aim(s) of study: *Please identify the key question you hope to answer, along with any secondary aims*

Primary aim: to describe the outcome of caudal auricular axial pattern flaps used to close skin defects involving the head and neck in dogs and to answer two simple questions:

1. How many caudal auricular axial pattern flaps heal without the need for revision surgery
2. How many caudal auricular axial pattern flaps heal without any wound breakdown

Secondary aim: to establish a group of surgeons intent on carrying out a future prospective study relating to skin reconstructive techniques in dogs

What is known already, and what will this study add? *This should be written in the style of the intended Introduction for the published paper resulting from this work, and should include a full reference list, with PDFs of all references to be attached to this application*

The caudal auricular axial pattern flap is based on the sterno-cleidomastoideus branches of the caudal auricular artery and vein. This flap is described in dogs and cats and has been used for neck, facial area, dorsal head, and ear reconstruction[1,2]. The flap is used to reconstruct wounds on the head and complications include seroma formation, severe edema, distal flap necrosis, and alterations in local hair color and direction of hair growth[3]. Flap survival has been reported as high as 85% in dogs but varies with length[2] and keeping the flap as short as possible may reduce this complication. Anecdotal evidence would suggest that the true survival rate is significantly lower and a larger case series is currently lacking in the literature.

References

1. Stiles J, Townsend W, Willis M, et al: Use of a caudal auricular axial pattern flap in three cats and one dog following orbital exenteration. Vet Ophthalmol 6:121-126, 2003.
2. Smith MM, Payne JT, Moon ML, et al: Axial pattern flap based on the caudal auricular artery in dogs. Am J Vet Res 52:922-925, 1991.
3. Spodnick GJ, Hudson LC, Clark GN, et al: Use of a caudal auricular axial pattern flap in cats. J Am Vet Med Assoc 208:1679-1682, 1996.

Details of pilot study already undertaken: *For example, retrospective analysis of your own clinical cases, or in-house testing of methodology*

Panel discussion at the AVSTS Autumn meeting in Swindon 2015 found that most surgeons within the audience felt that the caudal auricular flap survival rate is lower then other axial pattern flaps and by consensus the audience felt that a multi-center study supported by the AVSTS would be beneficial.

Study design: *Exactly how is the key question (above) going to be answered? This must allow full feasibility assessment of the intended work by AVSTS epidemiologists, and should include the following, where relevant: study type, cases (eligibility, ineligibility), controls, treatment schedule, outcome assessment, randomization, blinding, statistical design, study power, anticipated duration of data gathering*

Multi-center, retrospective case series.

Medical records of specialist referral centers will be searched to identify dogs that had a caudal auricular axial pattern flap for treatment of skin defects involving the head between 2005 and the end of the study. Animals will be included in the study if the medical records are complete with sufficient descriptions of flap appearance to allow outcome to be reliably assessed for a minimum period of 2 weeks after surgery; animals will be excluded if flap survival is insufficiently documented to allow reliable assessment of flap outcome.

The following information will be collected from the medical records: patient signalment, location of the skin defect, cause of the skin defect, time between injury and skin reconstruction, surgery and anesthesia times, peri-operative and postoperative antimicrobial administration, flap outcome, follow-up time.

Flap outcome will be assessed by dividing patients in one of three groups:

1. Uncomplicated first intention healing group – Complete healing without wound breakdown
2. Partial wound breakdown not requiring revision surgery
3. Flap breakdown, with or without flap necrosis, requiring revision surgery or euthanasia

Ethical review:

This study has been approved by the ethical committee of the Animal Health Trust

What specific requirements are there for other centers intending to participate? *For example post-graduate qualifications, RCVS hospital tier level, equipment requirements, caseload etc*

None

Owner consent form template: *for distribution to other centres. Please submit as a PDF*

Not Applicable

Data table template: *for distribution to other centres. Please submit as an Excel file*

Costing and Funding: *Please include details of the anticipated costs and of funding sources secured or to be approached*

Not applicable

Personal Statement:
I have read and understood the process by which the AVSTS Research Cooperative operates, detailed on the AVSTS website (www.AVSTS.org.uk) as the AVSTS Research Cooperative (ARC) algorithm. I accept and will comply fully with the spirit and letter of this algorithm. If I fail to comply with this process, as

written, then I accept that I may lose the right to be first author of this project, no matter how much work I have put in already. I will respect the decision of the Coordinator and Supervisor and return and delete the raw data provided to me. I will not use, or seek to use, the data given to me for any reason other than this ARC Project.

Signed:

Print name:

Date:

Please print, sign and send this ARC Application Form to Mr I Nicholson, Southern Counties Veterinary Specialists, Forest Corner Farm, Hangersley, Ringwood, Hampshire, BH24 3JW.

Please email the following PDFs to inicholsonvet@gmail.com : ARC Application Form; Application form for Clinical Research AHT Ethical Approval; Owner Consent Form Template; all articles referred to in the Introduction. Please also email an Excel file of the Data Table Template to the same address. Please note, all file names should be of the format firstinitialsurname_formname ie "jbloggs_ethicalapprovalform.pdf"

All submissions will be treated confidentially