BEVA Congress 2026

Clinical Research Sessions Abstract Guidelines

Abstracts must be submitted between Thursday 15 January and 5 February 2026.

The Scientific Programme Committee of the 2026 BEVA Congress invites authors to submit scientific abstracts for inclusion in the Clinical Research Sessions at Congress.

The aim of BEVA's Clinical Research Abstract sessions is to provide opportunities for clinicians and researchers to present high quality reports and research focused on equids that leads to improved clinical practice. For 2026, we are accepting abstracts in three formats: Clinical Research Abstracts (CRA), Clinical Descriptive Abstracts (CDA) and Clinical Audit Abstracts (CAA). Abstracts allow the sharing of work in progress and preliminary results as well as completed studies. Relevance to clinical practice is important to the BEVA Congress audience and will be a key factor when we make our final selection.

Those authors whose abstracts are accepted will be invited to present an oral presentation at Congress. For all abstract formats, oral presentations will be 10 minutes in length with an additional 2 minutes for questions. More advice on our requirements for oral presentations will be provided in due course to those authors whose abstracts are selected for presentation at Congress. **All accepted abstracts** will be considered for publication in a special online supplement of Equine Veterinary Journal. Clinical Research Abstracts, Clinical Audit Abstracts and Clinical Descriptive Abstracts are eligible for a range of awards for the most informative pieces of work.

The presenter of each accepted abstract will receive free registration at Congress for the day of his/her presentation. However, travel, subsistence and accommodation expenses will not be offered. Presenters are, of course, very welcome to register separately for other days of Congress.

Clinical Research Abstracts (CRA) Content and Format (*Examples can be found below.*)

CRA are intended for reporting experimental and prospectively designed studies addressing a specific hypothesis or question relevant to equine veterinary science and clinical practice. The CRA must be written in English and be no more than **300** words with the following headings:

- **Background:** The background behind the decision to choose the subject to study.

- **Objectives:** The statement that is being tested, and is testable by the methods (below); or the original aims and study deliverables.
- **Study Design:** Concise statement of the study design.
- **Methods:** Brief description of materials and methods, and methods of testing hypotheses.
- **Results:** Brief highlights of the results obtained. When commenting on significant comparisons, **p values alone are not sufficient**. You must include either mean ± SD or median & IQR for each group, or express the mean difference with 95% confidence intervals. 95%CI must also be included for odds ratios. Lack of data is the most common reason for rejection of abstracts.
- **Main Limitations:** Concise statement of limitations and sources of bias.
- **Conclusions:** Conclusions drawn from results.

Clinical Descriptive Abstracts (CDA) Content and Format (*Examples can be found below.*)

CDA are intended to allow clinicians and practitioners to report observations that they have made in clinical cases that shed light on possible harms, treatment outcomes or approaches to diagnosis and therapy that might be of interest to BEVA Congress delegates.

The CDA must be written in English and be no more than **500** words with the following headings

- **Background**: The background behind the decision to choose the subject to study.
- **Aim of Report**: Your goal in presenting this report, what do you hope Congress delegates will learn from it?
- **Case Population and Setting**: Details of study time-frame, location of practices or clinics involved, anonymised in the reviewers' copy.
- **Intervention** (if applicable): Description of the novel treatment or modified or novel technique under study.
- **Data Collection**: How you obtained data, if relevant to the report include details of who provided interpretation of materials such as cytology, histology and diagnostic imaging. Usually these individuals should be included as co-authors or acknowledged in declarations.
- **Clinical Observations**: Summary of your main findings.
- **Main Limitations:** Concise statement of limitations and sources of bias.

- **Conclusions:** Conclusions drawn from observations.

Clinical Audit Abstracts (CAA) Content and Format *(example below)*

Clinical audit is a cyclical process which drives quality improvement by measuring current practice against evidence-based standards to identify gaps and implement change that lead to better patient care and outcomes. CAA are intended to allow clinicians and practitioners to report how they have approached audit in practice and document audit methods, standards achieved and/or show how audit has driven change.

The CAA must be written in English and be no more than **500** words with the following headings

- **Background**: The background behind the decision to choose the subject of the audit and summary of the problem which your audit seeks to address.
- **Case Population and Setting**: Details of audit time-frame, location of practices or clinics involved, anonymised in the reviewers' copy.
- **Standards**: Definition of the standard(s) used to judge performance with references if available.
- **First audit data collection and results**: Brief description of how you collected your data and analysis of these data against the pre-determined standard.
- **Change implementation**: Description of how you sought to implement change based on the first audit or how you plan to do so in future.
- **Reaudit (if applicable):** Summary of improvements when the audit data collection was repeated and compared to first audit results (note statistical comparisons are allowed but are not mandatory).
- **Main Limitations:** Concise statement of limitations and sources of bias.
- **Conclusions:** Conclusions drawn from observations.

Files for reviewer use

For CDA and CAA (**but not CRA**) you can upload supplementary files for reviewer use – these might include Figures to support description of case population and setting - flow charts, illustration of typical clinical problem; Figures to support description of intervention – photographs/diagrams of technique or approach; Figures to support data collection – timelines, techniques; Figures to support clinical observations - gross images, diagnostic imaging, anatomy, surgical findings etc. and Summary tables to support clinical observations. These files are intended to help reviewers understand the study particularly if you are concerned that the approaches, process or treatments are difficult to convey in

only 500 words but you should bear in mind they will not be published in the supplement of EVJ so the abstract must be understandable without them. We anticipate that these figures or tables might be included in your oral presentation and reviewers may give you feedback to enhance your presentation, if the CDA or CAA is accepted.

Calculating word count and references

Use the deanonymised version of your abstract to determine word count and make sure you have finalised the word count before you submit, e.g. use Word's word count tool. Do not include the title, author lists and institution details or declarations (i.e. funding, acknowledgements, competing interests, ethics and consent, key manufacturers details) in your word count but **do include** any references in the word count. References can be included if they are absolutely essential. Use bracketed numbers [1], [1-3] etc. to cite references in the order that they appear throughout the body of the abstract. Reference format must include its author list, article title, journal, year, volume and page details. For details of reference format go to https://beva.onlinelibrary.wiley.com/hub/journal/20423306/homepage/forauthors.html

Declarations and Ethical Guidelines

All CRA, CDA and CAA submissions must adhere to the Ethical Guidelines outlined in Equine Veterinary Journal's Author Guidelines available at https://beva.onlinelibrary.wiley.com/hub/journal/20423306/homepage/forauthors.html, and make transparent and complete declarations of:

- **Funding** (Section 4.8)
- **Acknowledgements** (Section 4.10) use a maximum of 10 words.
- **Competing Interests** (Section 4.7) Take care to include your co-authors' competing interests as well as your own. Declaring a competing interest is not likely to lead to your abstract being rejected, but are essential so that readers and congress delegates can understand any financial links to the work being described. Failure to declare a competing interest is likely to lead to abstract rejection.
- **Ethical Animal Research** (Section 4.5) i.e. details of ethical framework for data collection from both animals and, if relevant, humans.
    - Ethical review is required for studies involving the use of experimental animals, or samples taken from research animals for experimental studies
    - Ethical review is required for all forms of prospective research using client-owned animals. In the UK, ethical review may be provided by your own institution or an associate institution or by the Royal College of Veterinary Surgeons (RCVS) Ethics Review Panel (ERP).

- Ethical review also applies in studies in which the data are collected from humans such as, for example, opinions, views and information from surveys and questionnaires or observations made in the workplace.
- Ethics Board Approval is usually associated with a reference number and this detail should be included in the declaration.
- Clinical Audit and retrospective case series using information from the clinical record do not usually require ethical review but if you are uncertain you should approach your local ethical review committee who may require that there is a formal exemption granted for this type of work

- **Informed Consent:** (Section 4.5)
  - Informed consent is extremely important and abstracts will be rejected if appropriate consent is not in place.
  - Consent applies not only to use of client-owned animals, but also applies in studies in which the data are derived from humans such as people who complete a questionnaire or contribute to a focus group.
  - For most prospective work, particularly if this involves randomisation, explicit informed consent is required. Explicit informed consent normally involves participants being made aware of the aims of the study, the methods used for data collection and the plans for publishing the results and finally signing a form that with full understanding of the specific research, they agree to participate and/or agree that the methods can be applied to their animals and the results published.
  - We also expect to see informed consent from animal owners when tissues from post-mortem exam are used but we do not expect to see informed consent if you have studied a micro-organism when that organism has been isolated during clinical procedures or during surveillance programmes.
  - Clinical audit and retrospective case series using information from the clinical record do not usually require informed client consent.
  - Authors frequently confuse consent to undertake veterinary procedures with explicit informed consent for a research study, audit or descriptive report.
    - Many veterinary practices and hospitals have a statement explaining that images and data may be extracted from the medical record for use in presentations and publications. This is **not explicit** informed

consent. In these circumstances it is permissible to state that "animal owners were made aware that the medical record might be used for research in general".

- If you have used data from medical records but do not inform your clients that you may do this, you may insert "not stated" in the informed consent section provided your study is limited to analysis of data and/or images from the medical record.

- Where equine samples, images or other data have been collected during a mandatory programme, such as a Governmental surveillance programme or required sampling by participants in a regulated sport, such as racing, you should explain which authority required the sample collection in the consent section.

- For samples derived from commercial abattoirs, consent is not necessary and "not applicable" can be inserted provided you have the permission of the abattoir owner to use samples for research.

- The phrase "not applicable" should only be used in the informed consent declaration if your work involves only experimental animals or uses no people, no animals and no tissue or fluid samples taken from client-owned animals.

- You can find more detail on informed consent in our main journal Author Guidelines https://beva.onlinelibrary.wiley.com/hub/journal/20423306/homepage/forauthors.html (Section 4.5.2) and if your research is not encompassed within the information above, insert as much detail as possible in the informed consent section and we will help you find the right description.

- **Key Manufacturers:** Where abstracts describe a study relating to any specific commercially available product (for example a treatment trial, a study looking at the validity or accuracy of a diagnostic test or a treatment device etc.), **the manufacturer's name** and a **link to their website** must be included. It is not necessary to include manufacturers' details for products which were used in the methods but are not directly related to the primary study objective (for example software, biochemical analysers, diagnostic equipment which was used but not directly studied etc.). Use a superscript number in the text of your abstract to refer to a numbered list of key manufacturers at the end of your abstract (before references and declarations) where relevant.

- You will also be expected to certify that your abstract complies with Equine Veterinary Journal's Antimicrobial Stewardship Policy (Section 4.6).

The declarations will be published within a section at the end of each abstract. Do not include it in the main body of your abstract or word count. **You will be required to make the same declarations, along with any other acknowledgements, at the beginning of your oral presentation at the Congress.**

Advice, Pitfalls & Common Errors

- Abstract titles should be short and interesting avoiding any unnecessary words. Do not use Brand Names in your title.
- Abstracts describing a study using clinical cases that lack confirmed, definitive diagnoses are not likely to be accepted.
- Preliminary data from an ongoing study can be used. But you cannot submit another abstract next year on the same data (even if you have added more data and it is more accurate), unless the abstract is about a completely different set of data or a different part of the project.
- You must put actual data in the abstract: do not submit the abstract expecting to get the data by the time you present it at the meeting. Abstracts that describe data as pending are not acceptable and vague statements such as "the results will be discussed" will not be acceptable.
- Data should be presented in an appropriate and meaningful fashion so that readers can understand the clinical relevance of any statistically significant comparisons. See 'results' section above: P values alone are not sufficient. You **must** include either mean + SD or median & IQR for each group, or express the mean difference with 95% confidence intervals (CI). 95%CI must also be included for odds ratios. Lack of data is the most common reason for rejection of abstracts.
- For clinical audit, we encourage you to complete all steps in the audit cycle but CAA which describe the first audit round and outline plans for implementation of change without a reaudit phase will be considered.
- Failure to include appropriate information on animal owner or participant consent will lead to abstract rejection
    - The most common errors we encounter when reviewing abstracts are that authors fail to provide a consent statement when (1) their study involved work on tissues/fluids derived from post-mortem examination or taken as

excess during clinical sampling, (2) the study involved prospective research on clinical cases, (3) authors confuse consent for veterinary procedures with consent for research data collection and publication. Consider whether "animal owners were made aware that the medical record might be used for research in general" might be the most accurate description.

- BEVA and EVJ understand that retrospective review of clinical material is often performed without the owners' explicit consent for the research. For retrospective review of data or images derived from medical records, lack of explicit consent is often acceptable, particularly where the owners were made aware in general terms that data might be used for research. If explicit owner consent for the specific study described in the abstract was given, this should be stated. A hospital consent form does not equate to study-specific consent for research, but often is used to make owners aware in general terms that data or images from the medical record or excess tissue or fluid samples taken for clinical purposes might be used for research purposes. If your hospital consent form explains this, you can mention that "general permission for research" was in place and comment on whether or not clients had an option to opt out.
- For post-mortem samples, as a minimum, we expect to see that owners gave consent for post-mortem examination and were informed, in general terms, that tissues may be retained for research.
- We also commonly see errors made when the study does not involve animals but the research involves data from humans (for example collecting views from vets, students, clients or the horse-owning general public). Ethical review is very important for "human data" studies because it is unethical to ask people to give up their time to participate in all but the best-designed studies.

- Ethical review is generally available through an institution (University or research facility) and may be accessible via other sources. In the UK the Royal College of Veterinary Surgeons (RCVS) offers ethical review via their Ethical Review Panel (https://www.rcvs.org.uk/who-we-are/committees/standards-committee/ethics-review-panel/) ETHICAL REVIEW MUST BE PERFORMED PRIOR TO COMMENCEMENT OF THE STUDY.
    - If an ethical review committee has informed you that approval is not required for your study, this detail is important and should be included in the relevant section of our submission form.

- For authors based outside the UK, ethical review committees may not be so easily accessible outside universities and institutions. If this applies to you, you should provide as much information as you can about your circumstances and access to ethical review committees in the relevant section of our submission form.
- Owner and human-participant consent can always be obtained regardless of whether your study has undergone a formal Ethical Review or not.
- If you are in any doubt about consent, read our main journal author guidelines and add as much information as you can in the relevant section of your abstract declarations (this is not included in the word count).

Preparing your abstract for submission

- Use single line spacing and Times New Roman 10 point font; do not indent paragraphs. Tables, graphs and figures cannot be published.
- Do not begin a new line for each section of the abstract; section headings in bold.
- A short title (maximum 35 characters) should be provided on submission. This will be used for the Congress scientific programme and handbook where space is limited.
- Check your word count **before** starting a submission – see above for what is/is not included in the word count.

Submission Dates

Clinical research abstracts can be submitted from **Thursday 15 January to 5 February 2026**. Submissions after this date will be rejected and will not be read.

Submission Process

The link for submitting your abstract will go live on 15 January 2026. To submit your abstract go to: https://mc.manuscriptcentral.com/evj-abstracts. **Please read and follow these instructions carefully**.

When you submit, you will be asked to choose between

1. Abstract - choose this category for Clinical Audit Abstracts.
2. Clinical Research Abstract
3. Descriptive Report

To facilitate anonymised peer review, 2 copies of your abstract must be submitted:

1. **Anonymised copy for peer review:** Remove author names and addresses and delete all identifying details and where appropriate replace these with the words

"details anonymised for peer review" in the main body of the abstract. Copy and paste this version into the manuscript information box on the submission system.

2. **Copy for production:** This must include the authors' names and addresses after the abstract title and all the Declarations described above at the end of the abstract. Underline the name of the person who will present at Congress.

Peer Review

Submitted abstracts will be peer-reviewed in an anonymised process abbreviated from that used by Equine Veterinary Journal for full manuscripts. After an initial editorial screening phase, abstracts will be reviewed by 2 individuals with expertise in the relevant topic. Both scientific quality and relevance to equine veterinary practice will be considered. Excessively poor grammar, lack of clarity of writing and failure to make complete and appropriate ethical declarations will be grounds for abstract rejection. Some authors **may** be given the opportunity to make revisions based on the initial advice of the scientific committee and peer reviewers. It is essential that if you are given the opportunity to revise, this is done promptly and within the stated deadline otherwise your abstract will not meet the requirements and will be rejected. Revision deadline extensions will not be given.

Prior Presentations and Publications

It is permissible to submit work that is similar or identical to abstracts that have been presented at any other conferences after 9 September 2025. Material presented PRIOR to this date will not be considered. Abstracts describing work that is currently being considered for publication in any peer reviewed journal at the time of abstract submission are not eligible.

Future Publication of Material in Your Abstract

Equine Veterinary Journal encourages submission of full papers describing work that has already been submitted or presented as clinical research abstracts at BEVA Congress. Publication of a 300 or 500 word abstract in this (or any other congress proceedings) will not prevent you submitting the same work as a full manuscript to Equine Veterinary Journal or Equine Veterinary Education (e.g. see EVJ author guidelines Section 3.1) but some other journals have more stringent restrictions. If you are considering future publication in other journals, authors are encouraged to verify guidelines with editors of specific journals and to be aware that some journals limit the length of previously published abstracts to as few as 250 words.

Questions?

- Queries relating to abstracts or Congress: email debbie@beva.org.uk
- Queries relating to the submission process: email jane@evj.co.uk

Examples: Clinical Research Abstracts

https://beva.onlinelibrary.wiley.com/doi/10.1111/evj.27_13855

Increased body condition score has a detrimental effect on arterial oxygen tension and increases the risk of hypoxaemia in anaesthetised horses

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Background: Impaired oxygenation during anaesthesia can be detrimental. Bodyweight and body shape influence arterial oxygen tension (PaO_2) but the effect of body condition score (BCS) has not been investigated. **Objectives**: To examine the effect of BCS on respiratory indices. **Study design:** Retrospective. **Methods**: 524 anaesthetic records were reviewed. Records from healthy adult horses under isoflurane anaesthesia in dorsal recumbency, receiving controlled mechanical ventilation, with complete ventilation and arterial blood gas data and BCS assessment by one person (K.L.) were included. Data were analysed using Students t-test, Mann Whitney U test, chi squared analysis and logistic regression. **Results**: 135 records for 85 horses with BCS < 6/9 (group N) and 50 horses with BCS ≥ 6/9 (group O) were included. Overall, there was a strong negative correlation between BCS and PaO_2 (Spearman's r = 0.72, p < 0.001). Group O had significantly lower PaO_2 (112 (50 – 546 mmHg)) compared to group N (380 (65 – 658 mmHg), p < 0.001) which remained when horses were categorised by bodyweight > 500kg (118 mmHg vs. 390 mmHg, p <0.001) and < 500 kg (160 mmHg vs. 451mmHg, p < 0.04). Group O were more likely to be hypoxaemic (PaO_2 < 100mmHg) compared to group N (p = 0.03) (OR = 34.39, 95% CI = 1.3 – 911, p = 0.03). Physiological dead space was greater in group O (0.27 (0.10 – 0.41)) *versus* group N (0.24 (0.12 – 0.35), p < 0.001). Multivariate analysis identified a significant association between PaO_2 and bodyweight (p = 0.01), physiological dead-space (p = 0.005) and BCS (p < 0.001). **Main limitations:** Retrospective clinical design. **Conclusions:** BCS ≥ 6 has a detrimental effect on PaO_2, physiological dead space and is a risk factor for hypoxaemia in healthy anaesthetised horses positioned in dorsal recumbency. **Ethical animal research:** Ethical approval (AVA 2020-012) was granted for this study. **Informed consent:** Not stated. **Competing interests:** None declared. **Sources of funding:** None required.

Short title: Body condition score and hypoxaemia.

https://beva.onlinelibrary.wiley.com/doi/10.1111/evj.20_13855

Machine intelligence for the detection of equine heart murmurs

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Background: Machine-learning algorithms combined with electronic stethoscopes have shown promise in automating the detection of murmurs and valvular heart disease in humans. However, there has been no previous work exploring the applicability of these methods to the detection of abnormal equine heart sounds. **Objectives:** To design a machine-learning algorithm to automatically detect the presence of murmurs in electronic stethoscope recordings made on the chest. **Study design:** Diagnostic method development and assessment. **Methods:** Heart sounds of 128 horses presented to Rossdales Equine Hospital were recorded using an electronic stethoscope at four standard auscultation sites. In total, 491 recordings (167 minutes) were made. The presence and grade of each murmur was assessed by an equine internal medicine specialist and an echocardiographic diagnosis was recorded. Horses with non-valvular pathology were excluded. A recurrent neural network model was trained to automatically identify the presence of a murmur in an audio recording. The algorithm was trained primarily on a large open-access database of human heart sounds, and then fine-tuned on half of the equine dataset. **Results:** Evaluated on an unseen test half of the equine dataset, the algorithm is able to detect loud murmurs (at least grade 3 of 6) with an area under the receiver operating characteristic (AUROC) of 0.86 (95% CI 0.80-0.92). The algorithm can achieve a sensitivity and specificity of 82% (95% CI 70%-90%) and 82% (95% CI 76%-87%) respectively, which are promising metrics for use as an assistive tool for general veterinarians. **Main limitations:** The number of control cases (including innocent flow murmurs) and the size of the test set was limited. **Conclusions:** Machine learning algorithms offer a promising method to increase repeatability and accessibility of auscultation and reduce reliance on echocardiography. Future data collection will focus on predicting the presence of valve disease using echocardiographic diagnosis as ground truth. **Ethical animal research:** Research ethics committee oversight not required by this congress: retrospective data collection. **Informed consent:** Not stated. **Competing interests:** None declared. **Sources of funding:** A. McDonald was supported by a doctoral training award from the Engineering and Physical Sciences Research Council (EPSRC).

Short title: AI-based detection of heart murmurs.

Examples: Clinical Descriptive Abstracts

Modified from: https://beva.onlinelibrary.wiley.com/doi/10.1111/evj.3_13855

CT findings in 21 foals with undiagnosed hindlimb lameness.

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Background: Limited data are available on computed tomographic (CT) findings of the pelvis, lumbar spine and hindlimbs in lame foals. **Aim of report:** To describe the range of pathologies and their location identified with helical CT in foals with hindlimb lameness and inconclusive clinical and/or radiographic examination. **Case Population and Setting:** Twenty-one foals 0-8 months of age with hindlimb lameness examined at Rossdales Ltd between July 2009 - March 2021 in which clinical and hindlimb survey radiographic examination (including stifle) had failed to definitively identify the lameness cause and CT had been performed. **Intervention**: Helical CT examination of the lumbar spine, pelvis and hindlimbs was performed under general anaesthesia/deep sedation in lateral/dorsal recumbency. **Data Collection**: Clinical and imaging details were extracted from the medical record. In every case, CT diagnosis was based on interpretation by one of two researchers (VGP, RCM). **Clinical Observations:** Location of pathologies included: 12 affecting the pelvis, 7 affecting bones or soft tissues close to/associated with the stifle, 2 had spinal pathology and one remained undiagnosed. Of the 12 foals with pathology in the pelvic bones, 8 had imaging findings consistent with osteomyelitis or infectious physitis, 3 had pelvic fracture related to primary trauma and one foal was diagnosed with a non-ossifying fibroma. Of the 7 with stifle-related pathology, 5 had imaging findings consistent with osteomyelitis and infectious physitis. One of these had pelvic and distal femoral osteomyelitis. The non-ossifying fibroma affected the pelvis and proximal tibia. One foal presented with severe soft tissue swelling at the level of the stifle, no underlying bone injury was found; post mortem examination revealed necrotising fasciitis. Of two foals with pathology associated with the spine, one was diagnosed with infectious discospondylitis and one with a vertebral luxation. **Main limitations:** Small case numbers. **Conclusions:** Osteomyelitis and infectious physitis associated with the pelvis were the most common findings in foals with hindlimb lameness and inconclusive clinical and radiographic examination, with traumatic fractures observed less frequently. **Ethical animal research:** Research ethics committee oversight not required by this congress: retrospective data collection. **Informed consent:** Explicit informed consent for this study was not obtained but horse owners were given the option to opt out of research. **Competing interests:** None declared. **Sources of funding:** None.

Short title: CT findings in hindlimb lame foals

Modified from: https://beva.onlinelibrary.wiley.com/doi/10.1111/evj.13982

Survival of formalin intoxication in a 13-year-old Thoroughbred gelding

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Background: Reports of enteral formalin intoxication in veterinary species are primarily limited to rodents in a research setting. Two equine case reports describe severe neurologic toxicity following intralesional formalin of an ethmoid haematoma and an ethmoid adenocarcinoma (due to diffusion of formalin through the cribriform plate) [1,2] but there are no equine reports on formalin intoxication by gastrointestinal route. **Aim of report:** To describe the successful medical management of formalin intoxication in an adult horse, after accidental administration via nasogastric tube. **Case Population and Setting**: A 13-year-old Thoroughbred gelding was referred following accidental administration of 10% formalin via nasogastric tube. **Data collection**: Extracted from the medical record. **Clinical Observations:** The horse originally presented to the referring veterinarian for colic where 1.8 L of 10% formalin was accidentally administered instead of mineral oil, a potentially lethal dose of formaldehyde. Approximately 20-hours following formalin administration, the horse was moderately tachycardic with the occasional ectopic beat, had tacky and hyperaemic mucous membranes, delayed capillary refill time, reduced borborygmi, and pronounced digital pulses. Diagnostic investigations at admission included laboratory blood analysis, urinalysis, electrocardiogram, abdominal ultrasound, palpation per rectum and gastroscopy. Results of the initial examination and clinical pathology were consistent with what might be expected with formaldehyde toxicity: hypovolaemia, gastrointestinal disease (small intestinal thickening and hypomotility, abnormal gross appearance of gastric squamous mucosa, leukopaenia due to neutropaenia and left shift, hypoalbuminaemia (likely due to protein losing enteropathy), systemic inflammatory response syndrome (SIRS) due to mucosal injury and early indicators of laminitis. Primary formaldehyde toxicity of other body systems was ambiguous: renal involvement (mildly increased urea with marked renal glucosuria), cardiac disease (inappropriate tachycardia and supraventricular premature beats) and quiet mentation could likely be secondary to the systemic derangements (hypovolaemia, SIRS, electrolyte and acid/base derangements) and pain. Intensive care included fluid and electrolyte therapy, anti-inflammatories and analgesia, digital cryotherapy, gastro-protectants and other methods of gastrointestinal support. The horse was discharged from hospital with no long-term complications. **Main limitation**: Single case. **Conclusion:** This is the first report of systemic formalin intoxication in the horse in which intensive therapy was successful.

[1] Frees KE, Gaughan EM, Lillich JD, Cox J, Gorondy D, Nietfeld JC, Kennedy GA, Cash W. Severe complication after administration of formalin for treatment of progressive ethmoidal hematoma in a horse. Journal of the American Veterinary Medical Association 2001;219:950-952, 939.
[2] Maischberger E, Jackson MA, Kühn K, Grest P, de Brot S, Wehrli Eser M. Ethmoid adenocarcinoma: severe neurological complications after combined laser ablation and intralesional formalin injection. Equine Veterinary Education 2014;26:563-567.

Ethical animal research: Research ethics committee oversight not required by this congress: retrospective data collection. **Informed consent:** The horse's owner gave informed consent for this report. **Competing interests:** None declared. **Sources of funding:** None.

Short title: Survival of formalin intoxication

Examples: Clinical Audit Abstract

Modified from: https://beva.onlinelibrary.wiley.com/doi/10.1111/evj.70097

Clinical audit of pre-procedural checklists in an equine referral hospital

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Background: Surgical safety checklists have demonstrated a positive impact on post-surgical morbidity/mortality in human medicine, and likely have an equal benefit in veterinary medicine. To realise their advantages, they must be correctly and regularly used. **Case Population and Setting:** A single large multi-disciplinary equine referral hospital. **Standards:** The RCVS Practice Standards Scheme [1] recommends 'the practice uses a checklist to [identify] the patient, procedure and current medications prior to the procedure'. The World Health Organisation (WHO) recommends that 100% of checklists should be completed in full [2]. **First audit data collection and results:** One hundred and forty-eight checklists (consisting of 23 sub-sections) were examined for completeness. Checklists were rarely fully complete. In the first audit, completion rates for various subsections ranged from 9% to 89%, with a median value of 64%. **Change implementation**: The checklist was redesigned after consultation with end-users, we introduced a hospital education scheme to improve staff understanding, regular e-mail reminders, and recruited key senior staff as champions. Lastly, it was made policy for checklists to be uploaded to

the horse's medical record. **Reaudit:** 30 new checklists were re-audited in the same manner. In the re-audit, the completion rates ranged from 80% to 100% with a median value of 93%. The sign out section was most likely to be incomplete. **Main Limitations:** Data were not collected in real-time and it is difficult to determine the significance of missing data. Staff were aware of the re-audit, it is possible that checklist compliance was temporarily increased. Fewer checklists were examined in the second audit. **Conclusions:** The interventions had a positive benefit on checklist completion. A clinical audit of checklists is a useful tool that can easily be conducted in practice, and may help promote a safety culture within hospitals.

[1]_RCVS PSS equine modules and awards, version 3.4. 2025 [accessed 23 March 2025]. Available from: https://www.rcvs.org.uk/document-library/equine-modules/
[2] Allene MD. Clinical audit on World Health Organization surgical safety checklist completion at Debre Berhan comprehensive specialized hospital: a prospective cohort study. *Int J Surg*. 2020; 24: 161–165.

Ethical animal research: Research ethics committee oversight not required by this congress: clinical audit. **Informed consent:** Not applicable. **Competing interests:** None declared. **Sources of funding:** None.

Short title: Pre-procedural checklists audit