

**Updated BEVA/BVDA Position statement on previous drafts of a suggested
Exemption Order with respect to equine dental treatments**

Following recent discourse between BEVA Dental Working Party and RCVS, in view of recent advances in the field, and a number of concerns expressed by members of the horse-owning public, we feel that it is imperative that previous drafts of a Veterinary Surgery (Equine Dental Procedures) Exemption Order (2004) be revised and updated if further legislative progress is anticipated and the revised guidelines (as below) be used for any further discussion with respect to exemption of any equine dental procedures

A table summarising the current treatments as of December 2007 with the risks involved and indicating appropriate responsibilities, which should form the basis for discussion should changes to the legislation ensue is included as Annex A.

Previous exemption order drafts included the procedures listed below, which in some cases left veterinary surgeons, EDT's and horse owners unclear on the division of responsibility and liability, and in others require updating in light of expansion of equine dental knowledge and techniques.

BEVA/BVDA comments on and revisions to statements included in previous drafts of the Order (2004) in relation to procedures following interim scientific progress and difficulties with interpretation.

CATEGORY 1 PROCEDURES

It is the current view of BEVA/BVDA that ultimately no lay persons should perform any procedures in the horse's mouth without suitable approved training.

We would advise that Category 1 procedures be described as *'Those procedures which an individual can perform after recognised training without specific attainment of qualifications'*.

Comments on individual procedures:

Original draft statement:

'Routine rasping (excluding power rasping);

'Removal of sharp enamel points, small dental overgrowths such as hooks and spurs'

Comment:

Routine rasping of equine teeth by the removal of sharp enamel points (and no more) has always been firmly accepted by BEVA/BVDA not to be an act of veterinary surgery, and we are happy for this to remain a Category 1 procedure as defined above.

'Hooks' and *'spurs'* are colloquial terms for 2 of many types of overgrowths and the terms are omitted in favour of the all encompassing term *'dental overgrowths'*. Over the years there has been considerable difficulty in defining a 'small' overgrowth. Recent advances

in knowledge of dental anatomy including the relation of the dentine to the pulp have revealed that both are vital sensitive living structures, and that the pulp may be present only millimetres from the surface of the tooth. It is now accepted that the removal of many overgrowths could involve cutting into sensitive dentine or pulp, with potentially serious adverse effects. For these reasons BEVA/BVDA feel that removal of such overgrowths by unqualified persons should be limited to overgrowths of 4mm or less, using manual instruments only.

The statement '*Routine rasping*' is vague, open to individual interpretation and could imply procedures in addition to those described, and therefore is omitted to avoid repetition and eliminate misinterpretation.

Revised statement::

'Removal of sharp enamel points using manual rasps only;

Removal of small dental overgrowths (maximum 4mm reductions) using manual rasps only'

Original draft statement:

'Bit seat shaping;'

Comment:

This is an unscientific colloquial lay term broadly taken to mean the rounding or contouring of the rostral aspect of the first upper and lower cheek teeth. It has no proven scientific basis and experience has shown considerable variation in the degree of this 'shaping' between operators. Some dental technicians perform excessive reductions including of entire teeth in performing this procedure with complications including reduced masticatory function, pulp exposure and subsequent death of the tooth. In almost all cases it necessitates rasping into sensitive dentine. BEVA/BVDA advises that a more descriptive term for this procedure is used to limit the misinterpretation of the procedure and to reduce the risk of dental injury.

Revised statement:

'Rostral profiling of the first cheek teeth (maximum 4mm reductions), previously termed 'bit seat shaping'

CATEGORY 2 PROCEDURES

Original draft statement:

'Extraction of loose teeth (out of the mouth). This includes incisors and temporary cheek teeth or those suffering from advanced periodontal disease. Teeth loose by physical accidents should be further investigated by a veterinary surgeon before being removed;'

Comment:

This was intended to permit extraction of very loose teeth with no vital periodontal attachments that were potentially causing discomfort to the horse due to their mobile state. Unfortunately this wording is exploited by some EDTs to include teeth where a very small amount of movement can be elicited using fingers or even forceps, thereby designating them as 'loose'.

Dental extraction with instruments involves separation of the dental tissue from the bone by dehiscence of the periodontal ligament which is a vital, sensitive structure. This is an invasive procedure, with serious potential complications and is clearly and act of veterinary surgery, and therefore not suitable for deregulation to paraprofessionals. Even extraction of loose teeth may be subject to complications such as sub gingival fracture or cemental hyperplasia making this a complicated and technically challenging procedure. Only teeth which have already undergone advanced periodontal disease, have lost all vital periodontal attachments, or small dental fragments with no vital periodontal attachments, and are loose to the extent that they can be extracted without the use of instruments are suitable for removal by an EDT. This was always the intention in the original draft. In addition at no time has the extraction of teeth with instruments (other than loose deciduous caps and normal non-displaced wolf teeth) formed part of the training or examination syllabus for the BEVA/BVDA EDT examination.

Therefore to minimize serious complications that affect horse welfare, the removal of teeth with instruments should not be deregulated to EDTs under any circumstances.

Revised statement:

'The removal of loose teeth or dental fragments with no vital periodontal attachments which are digitally extractable without the use of instruments'

Original draft statement:

'Extraction of vestigial upper pre-molars or 'wolf teeth'. Healthy fully erupted and non-displaced wolf teeth only'

Comment:

'Wolf' teeth are vestigial and are commonly, although not always, associated with simple and relatively shallow roots. This procedure has formed part of the training and examination syllabus for the BEVA/BVDA Examination and therefore we feel that this would be an acceptable procedure for an EDT, who has passed an examination approved by DEFRA, to undertake. However, due to the legal requirement for analgesia and the need for sedation in these cases, combined with the risk of trauma to adjacent tissues and structures (e.g. the palatine artery) we feel these procedures should only be done under the direct and continuous supervision of a veterinary surgeon.

Unerupted wolf teeth require gingival incisions, and displaced wolf teeth can present unpredictable hazards and therefore neither are suitable for extraction by EDTs.

Revised statement:

'The removal of erupted, non-displaced vestigial 1st premolar teeth ('wolf' teeth) with shallow roots in the upper or lower jaw under direct and continuous veterinary supervision'

Original draft statement:

'Dental hook removal (removal of large dental overgrowths over 5mm tall and involving at least 50% of the occlusal surface, including overgrowth of the whole tooth)'

Comment:

'Hook' is only one type of overgrowth and the all encompassing term 'dental overgrowth' is now preferred.

Recent advances in the scientific knowledge have illustrated the risks of excessive removal of dental tissue, and contrary to traditional dogma, dentine is a highly sensitive vital tissue. Excessive reduction of dental overgrowths has the potential for severe adverse effects on mastication by removing occlusal surface enamel, exposing sensitive dentine and exposure of the pulp tissue with potential pulpitis and death of the tooth. The use of instrumentation to reduce overgrowths and an understanding of the associated risks in damaging the teeth and soft tissues of the mouth has formed part of the training and examination syllabus for the BEVA/BVDA EDT Examination. Therefore reduction of dental overgrowths is a suitable procedure for an EDT, who has passed an examination approved by DEFRA, to undertake without the need for numerical definitions.

Revised statement:

'Removal of dental overgrowths, without risking exposure of the pulp or adversely affecting mastication'

Original draft statement:

'Techniques requiring the use of dental shears, inertia hammers and powered dental instruments (including power rasps)'

Comment:

Due to the advances in knowledge of dental anatomy as outlined above, the use of dental shears and inertia hammers which act by fracturing teeth are now considered utterly obsolete.

The range of motorised instrumentation and the scientific understanding of the associated risks have evolved considerably in the last 10 years, such that it is possible to remove considerable dental tissue in a very short time.

However, these instruments have the possibility to damage dental tissues, bone and soft-tissue, especially if used inappropriately. In addition, should the horse panic in response to mechanical or electric instruments during such procedures, they have the potential to inflict serious injury to both horse and operator. We therefore consider that motorised instruments should be used in horses appropriately sedated for the procedure.

Alongside the advances in motorised instruments for overgrowth reduction, there have been new motorised instruments developed for the treatment of periodontal disease, dental decay (“caries”) and pulpal disease (“endodontics”). These include compressed air powered instruments similar to human or small animal dental stations. The complex surgical nature of the procedures these instruments are designed to treat and the high risks of damaging teeth and adjacent soft tissues dictate that these procedures should only be carried out by veterinary surgeons with considerable expertise in this field. It is therefore our view that to minimise serious complications that affect horse welfare, it would not be acceptable to deregulate the use of this type of motorised instrument to EDTs under any circumstances, and that the use of motorised dental instruments by suitably qualified EDTs should be specifically for the reduction of dental overgrowths and to remove sharp enamel points only.

Revised statement:

‘The use of motorised dental instruments where they are used to reduce focal overgrowths and remove sharp enamel points only, in horses sedated appropriately.’

Original draft statement:

‘Non surgical orthodontic treatments’

Comment:

This was intended to cover orthodontic techniques such as the use of bites plates that attach to the head collar of young horses to aid the correction of orthodontic conditions such as parrot mouth. The term has been extended by some EDTs to include large scale dental reductions and use of acrylic attachments to incisor teeth for treatment of the same condition. The efficacy of many of these procedures is unclear and orthodontic treatments have never formed part of the syllabus for the BEVA/BVDA EDT Examination. It is our current feeling that to minimize serious complications that affect horse welfare, orthodontic treatments are not an acceptable procedure for an EDT to undertake.

Revision:

Remove statement entirely

Original draft statement:

‘Treatment of fractured and diseased teeth (not involving cutting of tissue)’

Comment:

This statement is unacceptably vague and open to gross misinterpretation to include any veterinary treatment of fracture or disease.

Revision:

Remove statement entirely

Original draft statement:

'Extraction of dental fragments and palliative rasping of fractured and adjacent teeth'

Comment:

Extraction of fractured teeth can be technically very challenging, often involves invasive surgery under general anaesthesia and has a higher complication rate than extraction of intact teeth.

Since only the palliative rasping of fractured and adjacent teeth is part of the syllabus of the BEVA/BVDA EDT examination with respect to fractured teeth, this procedure is appropriate for an EDT, who has passed an examination approved by DEFRA, to undertake. Occasionally digitally loose fracture fragments that do not communicate with pulp, with disrupted periodontal attachments are encountered which are causing soft-tissue trauma. Reduction or removal of these by a properly trained and qualified EDT is appropriate. Removal or treatment of all other fractured teeth involves trauma to soft-tissues or pulp and is invasive veterinary surgery and should not be deregulated.

Revised statement:

'Palliative rasping of fractured and adjacent teeth'

Conclusion

In order to provide a greater degree of clarity in advising veterinary surgeons on working with EDTs and to inform and protect the public BEVA would suggest that veterinary surgeons cooperate with suitably trained, qualified EDTs for the following procedures. We feel strongly that it is to the benefit of horse welfare for veterinary surgeons to continue to collaborate with qualified EDTs, and BEVA recommends collaboration with registered members of the British Association of Equine Dental Technicians (BAEDT).

For the purposes of clarity we use category descriptors, although the categories as defined in the 2004 drafts **are now considered obsolete** (in view of advances in equipment and recent research).

Category 1 Procedures

Those procedures which an individual can perform after recognised training without specific attainment of qualifications.

- 1) Examination of teeth;
- 2) Removal of sharp enamel points using manual rasps only;
- 3) Removal of small dental overgrowths (maximum 4mm reductions) using manual rasps only;

- 4) Rostral profiling of the first cheek teeth (maximum 4mm reductions), previously termed 'bit seat shaping';
- 5) Removal of loose deciduous caps; and
- 6) Removal of supragingival calculus.

Category 2 Procedures (Replaces category 2 as on 2004 draft)

Additional procedures suitable for delegation to an EDT who has trained and passed an examination approved by DEFRA:

- 1) Examination, evaluation and recording of dental abnormalities;
- 2) The removal of loose teeth or dental fragments with no periodontal attachments which are digitally extractable without the use of instruments;
- 3) The removal of erupted, non-displaced wolf teeth in the upper or lower jaw under direct and continuous veterinary supervision;
- 4) Palliative rasping of fractured and adjacent teeth; and
- 5) The use of motorised dental instruments where these are used to reduce overgrowths and remove sharp enamel points only, in horses sedated appropriately.

All other procedures and any new procedures, which arise as a result of scientific and technical development, would by default be classified as Category 3, which are those procedures restricted to registered veterinary surgeons.

BEVA Dental Working Party on behalf of BEVA Council

April 2008