

Dental Charting: The First Step Toward Case Success

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As a frequent consultant and instructor, I have the incredible opportunity to meet many of you within your own practices. When I ask if you chart your dentistry, most of you enthusiastically report that you do. This is a positive change from the past. Now, I would like to take this opportunity to look at the dental chart in detail and review the importance of this document.

But before we start looking at the document and how to record your findings, I recommend we review some anatomical terms as they relate to the mouth and associated structures.

First, you should know the proper and expected dentition of puppies and kittens versus adult dogs and cats. In the puppy, there are no deciduous first premolars or molars. In the kitten, there are no deciduous molars. Also, it is important to know the eruption schedules. In the puppy, primary or deciduous teeth begin to erupt around 3-6 weeks of age. Usually, by 6 months of age, the adult teeth are replacing the primary teeth. Also, it should be mentioned here that many of the “micro-breeds” tend to experience a delayed eruption. This is important information when planning treatment options for extracting retained deciduous teeth.

Begin the assessment of the head by looking at your patient squarely in the face and note any swellings or asymmetry while the patient is still awake and conscious. Note any facial abnormalities such as unilateral facial swellings.

If the patient is cooperative, a conscious intraoral exam can be very beneficial in case planning as well. Things to note are; the bite, tooth occlusion and any tooth-to-tooth contact and any tooth-to-tissue contact. The tissues of the gingiva, the mucosa and the lips all should be examined, and notes made of any abnormalities. Also, note any odor, discharge, swelling, tumors, etc.

Once you feel a good conscious intraoral exam was performed, the patient should be anesthetized for the comprehensive assessment. This is when you can gather the most information. One person should be performing the examination, and another should be recording the information. It is a good practice to have the person who is performing the anesthesia make the notations on the dental chart.

Tooth identification

There are several different methods of referring to each tooth. A tooth can be identified with an abbreviation. For instance, the left upper fourth premolar would be noted as LUPM4. The benefit of that is that everyone can understand that.

The other method is called the modified Triadan numbering system. The first number refers to the quadrant that the tooth is found. The second and third refer to the tooth position starting rostral and moving caudally. The right upper arcade is the 100 series, 200 is the left upper arcade, 300 series is the left lower arcade and the 400 series is the right lower arcade. Tooth 401 would be the right lower first incisor and tooth 411 is the right lower third molar.

Deciduous teeth are the 500,600,700 and 800 series in the same pattern.

The modified Triadan numbering system applies to the cat dentition as well. The difference is that they have fewer teeth. Cats have no upper first premolars, they have no first and second premolars on the lower arcades and there is only one molar in each arcade.

So here are some easy landmarks for you:

- The first incisor is always 01
- The canines are always 04
- The first molars are always 09

Anatomical direction:

- Tooth surfaces that touch the front lips – labial
- Tooth surfaces that touch cheeks – buccal
- Tooth surfaces that touch palate – palatal
- Tooth surfaces that touch tongue – lingual
- Anterior portion of a tooth – rostral
- Posterior portion of a tooth – caudal

So, once you have performed the complete visual oral assessment, it is time to start making notes on the dental chart. The purpose of a dental chart is to make record of the state of the mouth on that day. A veterinarian that was not involved in the procedure at all should be able to understand exactly what condition each tooth was in just by looking at this chart.

Often, I have gone to practices that state they chart their dentistry. In fact, what they do is circle all missing teeth and “x” out all extracted teeth. Complete charting involves much more than that. There should be adequate room to make notes as to signs, diagnosis, treatments, prescriptions and take-home instructions. An anatomical graphic showing every expected tooth in that species should be present and large enough that you can make notations of periodontal probing depths on at least two surfaces.

Periodontal probing

Since the statistic is that 70-85% of all companion pets over the age of 3 have periodontal disease, we need to make notations as to the pocket depth on each tooth. Without these numbers, there is no way that we can follow the progress of the therapy.

There are many periodontal probes available. I find that it is easiest for measurement of pocket depth if you choose a Williams periodontal probe. This instrument has markings at each mm. There is a heavier band at 4-5mm, 9-10mm, 14-15mm. This instrument is positioned parallel to the crown and gently guided under the sulcus of the tooth until the tip reaches the ceiling or the floor of the pocket. The intention of the technician using this instrument is to detect and measure periodontal pockets and clinical attachment loss. At the very least measurements should be recorded at the deepest pocket depth on the mesial and buccal aspects of the teeth and the lingual and palatal aspects of the teeth. Any pocket depth greater than 1 mm in a cat or 3mm in a dog is considered a periodontal pocket.

Other critical notations are tooth fractures; enamel fractures, uncomplicated crown fractures, complicated crown fractures, uncomplicated crown root fractures, complicated crown root fractures and root fractures. The classification of these fractures can be found at www.avdc.org.

An explorer is the very pointed tipped instrument used to enhance tactile sensation. This instrument allows the technician to detect any abnormalities in enamel integrity. The sharp end will transfer a change in feel when in contact with tooth resorptions, enamel hypoplasia and carious lesions.

Other gross clinical observations

All other abnormalities should be noted:

- Discolored teeth
- Fractured teeth
- Mobility
- Furcation exposure classification
- Tooth resorption classification (www.AVDC.org)
- Fistulae
- Crowding
- Tooth rotation
- Abrasion versus attrition
- Enamel defects
- Foreign bodies
- Oral masses
- Supernumary teeth
- Stomatitis

A very comprehensive list of appropriate abbreviations can be downloaded from <http://www.avdc.org/traineeinfo.html>.

Intraoral radiographs are taken and those findings associated with each tooth should be noted on the record. Once the veterinarian has made a diagnosis and treatment plan, this is shown and noted on this chart as well.

As you progress in increasing your dentistry skills, there will be more and more things diagnosed and different treatment options will be offered and provided. This document will be your way of providing a means of clear communication for individuals within your practice and to those you are referring care.

The standard of care expected by the state boards in relation to dentistry is increasing every year. AAHA standards also make it clear that good record keeping and charting for dentistry services provided is expected. Since the down turn in the economy has hit dentistry services and surgery services hard across the country, we should look at this opportunity as a “speed bump”. Speed bumps are provided in order for us to slow down and evaluate the current conditions. This is an excellent opportunity for us to take this skill to the next level.