Specialized Care for Avian & Exotic Pets
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Dental Disease in Herbivorous Small Mammals

Normal Tooth Anatomy

Our herbivorous small mammals evolved what are known as hypsodont teeth. These are teeth with an open root structure designed to eat thick vegetation such as hay. This open root structure means that these teeth will constantly grow throughout the life of the animal, and need to be ground down. There are generally two regions of teeth when talking about our small mammals such as rabbits, guinea pigs, and chinchillas. This includes the incisors in the front and the "cheek teeth", which are the primary chewing teeth in the mouth.

Symptoms of Dental Disease

- **Incisor growth** - changes in the growth of the more visible incisors can often indicate more severe changes in the cheek teeth in the back. Exceptions to this include primary disease of the incisors or traumatic changes.
- **Appetite** - monitor for any changes in the types of food that your pet is eating or the overall volume. Some dental changes can be painful and cause a reduced appetite. Others interfere with the ability to chew and so some animals will preferentially eat softer or easier to eat foods.
- **Facial abnormalities** - Dental disease can impact the sinuses and surrounding structures. This means that you can sometimes see abnormal swelling on the face, nasal discharge, or watery eyes.
- **Dropping food** - Depending on the extent of changes to the teeth a pet dealing with dental disease may hypersalivate or drop food while chewing. After eating this can present with crusting/buildup on the chin.

Causes of Dental Disease

- **Inappropriate diet** - the most common cause of acquired dental disease is a diet lacking in appropriate hay content. Chewing hay is the primary method of grinding down the cheek teeth.
- **Genetics** - while there are no definitive markers for genetic predisposition of dental disease, there are some instances in small animals where they will develop dental disease due to congenital abnormalities affecting jaw structure
- **Trauma** - traumatic injury to various teeth from falls, chewing inappropriate, or other issues can lead to deformity causing dental disease
- **Infection** - abscesses of both the roots of teeth as well as inner ear disease in some species will cause changes to the dental structure. Some can also cause pain that leads to abnormal chewing, which leads to the development of dental disease as a secondary problem

Management of Dental Disease

Dental disease can present with a multitude of changes. These can include painful points on teeth, abscessation of teeth, overgrowth blocking normal chewing, and abnormal angulation to teeth. The underlying cause and severity of these changes define to what extent treatment is needed.

In some mild cases dietary changes may be all that's required to help reverse changes associated with dental disease. This sometimes includes using tools to remove points on teeth that can cause associated pain.

Unfortunately, more commonly dental disease requires long term management regardless of the underlying cause. This can include anesthetized procedures in order to trim back the teeth or surgical intervention to pull affected teeth/clean out abscesses. Some animals will need to have their teeth trimmed as often as every 3 to 4 weeks for the remainder of their life. This is important to take into consideration when discussing long term management of dental disease. In some cases of severe dental disease quality of life long term may need to be a part of the discussion.

Prevention of Dental Disease

The best way to prevent dental disease is to ensure appropriate husbandry. While some causes of dental disease mentioned above are not within our control, appropriate husbandry such as correct dietary management can help reduce the risk of dental disease developing. Early detection of dental changes is also crucial for best chances at intervention. For this reason we recommend that small mammals have at least a yearly visit to the vet (every 6 months for geriatric pets) to assess their dental health.