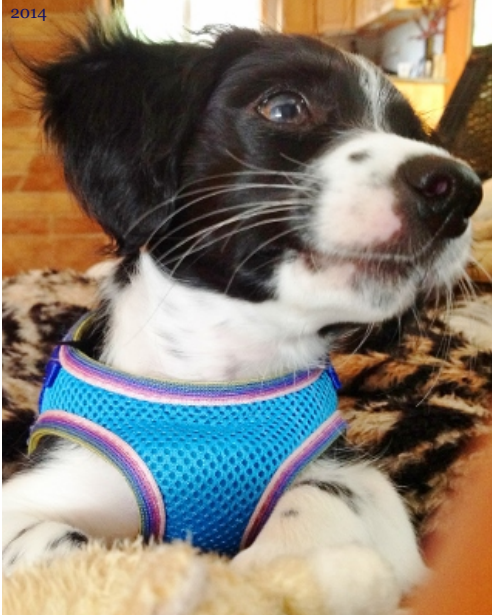


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**MAY 13 When can an overbite be a problem for your growing puppy?  
Have you ever heard of dental interlock?**



**Seattle veterinarian Dr. Robin E. Riedinger explores the potential dangers of an overbite for your puppy.**

Enzo is the Hawthorne Hills Veterinary Hospital Pet of the Month for May. Everyone knows that puppies need vaccines to keep them healthy and protected from diseases. However, it can be easy to underestimate the benefits of thorough and regular examinations when puppies are growing into adulthood. Every breed has special characteristics that make them unique and add to their appeal and sometimes there are physical changes that need to be addressed quickly. For this reason our veterinarians believe in examinations with every vaccine, especially during a puppy's formative months.

Enzo is a short-haired Havanese and he was born with his lower jaw shorter than the upper jaw. This is called an Overbite, also referred to as an Overshot Jaw, a Parrot Mouth or Mandibular Brachygnathism. This malocclusion is a genetic change and can be seen in a number of breeds, oftentimes collie related breeds and dachshunds. Occasionally this change happens because of differences in the growth of the upper and lower jaws, and in many cases it doesn't cause any significant problems other than cosmetically.

Dr. Robin Riedinger evaluated Enzo at his first visit when he was just 11 weeks of age and while the lower jaw was too short, there was no evidence of damage and no indication that this was causing a problem for Enzo. When there is abnormal occlusion of the teeth, it is important to monitor closely for trouble caused by the teeth being aligned improperly. Malocclusions can lead to gum injuries, puncturing of the hard palate, abnormal positioning of adjacent teeth, abnormal wear and bruising of the teeth, permanent damage and subsequent death of one or more teeth, and in the long run, premature loss of teeth. Some malocclusions can be severe enough to interfere with normal eating and drinking.

Within three weeks, when Enzo was only 3.5 months old, it was clear that our doctors would need to intervene. The left and right sides of Enzo's upper jaw (maxilla) were growing at different rates because the lower canine teeth were being trapped by the upper canine teeth. This is called Dental Interlock. Because the teeth are 'locked' in place, the lower jaw cannot grow symmetrically and this creates a number of other problems. Early intervention is critical.

Here are pictures of the changes Dr. Riedinger was seeing in Enzo's mouth.

1.) View showing the overbite – the upper jaw is significantly longer than the lower jaw.



2.) View showing the right side lower canine tooth behind the upper canine tooth.

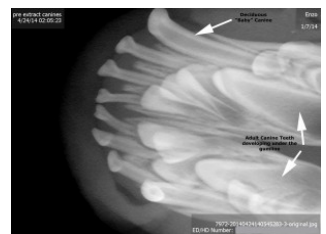


3.) View showing the left side lower canine tooth in front of the upper canine tooth.



The solution for Dental Interlock is to extract the teeth from the shorter jaw; in this case, the lower 'baby' canines and thereby allow the lower jaw (mandible) to grow in the best way possible. This procedure is most effective when the Dental Interlock is discovered early and the extractions are performed quickly. In some cases, this can be as early as ten weeks of age. Dr. Riedinger consulted with a local veterinary dental specialist to confirm the treatment plan and to get advice on extracting the deciduous teeth without damaging the developing adult canines. Dental radiographs are essential to proper extraction technique and also to ensure that there are no other abnormalities below the gumline.

This dental x-ray image shows the deciduous teeth, and the second row of developing adult teeth within the jaw just below the gumline.



This picture shows the 'baby' or deciduous teeth after extraction.

You can see how long the roots of the deciduous 'baby' teeth are. During normal growth, the body will begin to resorb the roots, making them loose, and allow them to fall out as the adult tooth begins to emerge. When we need to remove the deciduous teeth before they are loose, it can be quite tricky to remove the tooth carefully without breaking it and without injuring the adjacent teeth.



Once extracted, each deciduous canine tooth was about 2 centimeters long; the roots were about 1.5 centimeters. Many people are surprised to learn that the root of a dog's tooth is so large – 2/3 to 3/4 of the tooth is below the gumline. This is one reason why it is so important to use radiographs to evaluate teeth on a regular basis, not just in a growing puppy. Adult teeth can, and frequently do, have problems that are only visible with a radiograph.

Enzo came through his procedure extremely well. He was given pain medications for comfort and had to eat canned foods and avoid chewing on his toys for the next two weeks to ensure that the gum tissue healed properly. As he continues to grow we will be monitoring how his jaw develops and Dr. Riedinger will also be watching the alignment of his adult canine teeth when they start to emerge around six months of age. Hopefully this early intervention will minimize problems for Enzo in the future.

Links for additional information about some dental issues:

- Article with an overview of alignment issues written by Jan Bellows, DVM, DiplAVDC (veterinary dental specialist):
  - <http://www.veterinarypartner.com/Content.plx?P=A&S=O&C=O&A=164>
- Information from the American Veterinary Dental College:
  - <http://www.avdc.org/malandortho.html>

Robin E. Riedinger, DVM Hawthorne Hills Veterinary Hospital, Seattle WA | **Dental Disease, Surgical Conditions, Treatment**

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## 7 thoughts on “When can an overbite be a problem for your growing puppy? Have you ever heard of dental interlock?”

1.  Regina says:

February 9, 2016 at 1:14 am

We're looking into having the same procedure for our labrador puppy, who is currently 7 weeks old. Did Enzo's jaw develop normally after the procedure? Did you have to cap/adjust the adult teeth? Either way, we send Enzo our best wishes for health and comfort 😊

Reply

1.  siteadmin says:

February 9, 2016 at 5:14 pm

Thank you for replying to our post. These are situations where it is so important to seek the best care with your pet's primary veterinarian since every circumstance is different. Since you asked, here is the follow-up with Enzo.

I am Enzo's mother (Sara) and I work here at Hawthorne Hills Veterinary Hospital.

Enzo's jaw did develop normally although he did develop an issue with adult lower canines starting to create some trauma to the upper palate because of their length and placement. When he was about 10 months old he