The oral cavity is the fourth most common place to find cancer. Part of the reason for this high incidence may be the increase in advanced periodontal disease occurrence over the last few decades. There are many factors, but the high popularity of small and toy breed dogs likely relates to the increase in gum disease. There are several studies on the human side that show a relationship between periodontal inflammation and oral neoplasia.

One of the big questions to answer is if the growth is benign or malignant. While it is impossible to know what the exact tumor type is without histopathology, there are some clues which can help you educate the owners. In addition, nothing the physical and radiographic findings can help the pathologist. Finally, if you feel that the mass is benign, considering an excisional biopsy may be a good alternative.

When it comes to determining benign vs malignant clinically, size doesn’t really matter we see benign lesions which are very big and malignant ones which are very small. One thing that does make a difference is ulceration vs smooth, smooth growths tend to be benign. Also, benign growths generally grow out as opposed to invading. Finally, if a growth is pedunculated, it is generally benign.

Truly benign growths should not have any radiographic changes. Slightly aggressive tumors (which I have termed benign “ish” which are acanthomatous ameloblastomas and plasma cell tumors as well as cysts grow by expansion, creating a void and moving teeth. Aggressive oral neoplasms (SCC, FSC, Melanoma) grow by invasion. This generally leaves the teeth where they are and create a moth-eaten affect.

In this case, there was a large growth palatal on the maxillary right P4 (108), but it was smooth. (Figure 1). In addition, it was pedunculated (Figure 2). Finally, dental radiographs revealed no evidence of bony resorption (Figure 3). In this case a presumptive diagnosis of a benign growth can be made. This was confirmed by histopathology.
Figure 1: Large Smooth oral mass on the palate of a dog

Figure 2: The mass is pedunculated.

Figure 3: The intraoral dental radiograph reveals no evidence of bony reaction.