Elongation and dental malocclusion in a Guinea pig: a case report

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Case description: Guinea pigs' teeth are "open rooted" and grow continuously. Sometimes the root grows or is pushed into the jaw, resulting in elongated roots. Dietary problems are the most important risk factor of this phenomenon. Every time a guinea pig becomes anorexic or a reduction of food intake occurs, root elongation appears rapidly. Some root elongation of the upper roots may obstruct the lacrimal duct.

An adult female guinea pig was referred to surgery ward of veterinary hospital of Tehran university with high grade root elongation and anorexia.

Clinical finding: Clinical examination showed anorexia, weight loss and dehydration. Dental radiographic findings revealed root elongation grade 3 and thinning of ventral mandibular border.

Treatment and outcome: The animal was sedated with low dose of ketamine and xylazine, the cheek teeth were adjusted by surgical intervention. The teeth were clipped and the crown height was reduced. Following the procedure another radiograph was taken in order to evaluate the trimmed teeth.

Clinical relevance: An examination of the mouth may give no clue that this condition exists. Elongation of the lower roots can sometimes be felt as bumps along the jaw line. Elongation of the upper roots may put pressure on the eye causing tearing, bulging of the eye, infection, or other problems. Guinea pigs are unspecialized herbivores, and their primary foods in nature are grasses. In captivity, however, they often only receive concentrated or processed foods. This causes a decrease in tooth abrasion and use of teeth and jaws would be lowered like the discussed case. There is no definitive treatment for this case but the only way is trimming of the involved teeth and to modify the animals diet which should be consists of grasses.

Key words: Root elongation, Guinea pig, Dental malocclusion.

References: