

DENTAL X-RAYS

Opinion has been growing amongst specialists and general practitioners alike, that dental x-rays are now an integral part of dental procedures, and dentals performed on animals should always involve a dental x-ray unless a specific reason prevents this. When we as owners or veterinary professionals look at an animal's teeth, we can only see the tip of the iceberg – the visible crown of the tooth. We cannot see the root or jaw bone surrounding the tooth without x-ray, and substantial disease and pain can be associated with these areas without any sign of problem on the visible part of the tooth.

We have all most likely experienced some degree of toothache in our lives and our animals may also have similar sensations regarding dental pain. The difference with animals is that they often do not show any external signs of this pain as they have evolved in the wild to hide signs of discomfort and carry on eating at all costs. Combine the lack of symptoms with potentially normal looking teeth in the mouth, and it can be impossible to find sources of pain such as tooth root abscesses without a dental x-ray picture. Without a dental x-ray, many sources of ongoing dental pain can be missed, with animals continuing with pain after a dental procedure. We as vets cannot fix what we do not know about.

Add to this that many referral practices suggest that more complications arise in general practice where dental x-rays are not used and we start to see the importance of this tool. Any vet in general practice or a specialist, will have the odd tooth root snap during extraction as they are very long, thin and fragile in cats and dogs compared to humans. With a dental x-ray, we can check whether a root fragment is left, where it is and remove it. Without x-rays, it can be difficult to locate the fragment for extraction, leading to ongoing inflammation and discomfort if it is not removed entirely.

Assessing anatomy

Dental x-rays allow us to identify:

- **Abnormal tooth root shapes** – for example, kinked roots that would be hard to remove or prone to snap without prior knowledge.
- **Missing roots or extra roots** – When extracting premolars and molars, we have to cut the tooth into separate pieces before removing each root individually. Extra or missing roots affect where we partition the tooth. Without this knowledge, roots can be more prone to break as a complication.
- **Lack of jaw bone** – some teeth make up the majority of the lower jaw which means little support is left during and after removal of teeth. These animals can be at very high risk of jaw fracture and may be referred to a dental specialist for removal of problematic teeth – small breeds are most at risk. We wouldn't know of this potentially serious risk without being able to see it on a dental x-ray.
- **Missing teeth** – sometimes teeth do not erupt properly but can sit in the jaw bone for years. These can be prone to a painful and dangerous development into a dentigerous cyst that

can cause extensive damage to the bone and jaw.

Assessing disease

Dental x-rays allow us to see disease in the parts of the tooth we cannot see with our eye. For example:

- **Periodontal disease** – the bone around the tooth root can recede, reduce the attachment of the tooth to the bone, and expose sensitive/painful parts of the tooth.
- **Tooth root abscesses** – these can occur even if the visible part of the tooth looks healthy and can be incredibly painful. Antibiotics alone are not likely to solve the problem – tooth extraction is required.
- **Resorptive lesions** – part of the disease process affects the root that we cannot see and knowing this is vital for correct treatment and resolution of substantial pain.
- **Tooth trauma** – to assess if the tooth needs removal or can benefit from a root canal procedure.

At Molecare, we are strong advocates for the importance of a dental x-ray, and we hope, from the examples above, that you will also see the benefit. Our vets now have the most up-to-date digital dental x-rays and will use them on every case where appropriate unless specifically declined by the owner. Dental radiography requires considerable skill and a little extra time compared to not using it, but it is invaluable in reducing dental complications and identifying painful problems under the gum that may otherwise be missed leading to ongoing pain. We will take dental x-rays prior to any extractions to identify any abnormal anatomy and the extent and severity of disease in order to provide the best possible care we can for your pet.

If you would like to book a dental x-ray for your pet, please contact us on 01626 835002.