

7. Summary

Investigation of primary multiplicity in spontaneous mammary tumours in the bitch via wholemout – technique: Relevance for therapy after single tumour diagnosis

In this study 18 mammary glands of 15 bitches with mammary tumours (tumour group) and 11 mammary glands of 6 animals with clinically inconspicuous mammary glands (control group) were investigated.

Dogs of different breeds with an age of 5 to 17 years were included.

With the wholemout - technique it could be demonstrated that in addition to the 50 clinically diagnosed tumours, 52 clinically not identifiable tumours were present in the mammary glands of the tumour group. In both cases the tumours were found mostly in the caudal complexes.

In the clinically inconspicuous mammary glands of the control group, 4 unidentified tumors were detected in 2 dogs.

94% of the dogs in the tumour group had primarily multiple tumours. Furthermore, 88,1% of the total neoplastic changes are histologically malignant.

The evaluation of the remaining mammary gland tissue outside the tumours was performed via previously defined categories. It could be shown that especially in the vicinity of tumours changes resembling basalioma-like structures were observed. Furthermore, more severely dysplastic changes could be found mainly in the immediate proximity of macroscopically not identified tumours.

After mastectomy 6 dogs of the tumour group could be observed for up to 3.5 years. The rate of death attributed to the mammary tumours is 17% in the first year after operation and 50% after 3,5 years.

With this study it could be shown that with other operation techniques than total mastectomy, residual neoplastic tissue would have remained in the dogs in more than 50% of the cases. This would have necessitated a further operation at a later time.