

Surgical Margins For Complete Excision Of Canine Oral Melanomas.

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Oral malignant melanoma (OMM) is a common malignant neoplasia in dogs. Complete excision is recommended, but suggested surgical margins for OMM are variable and unvalidated.^{1,2,3} This study investigates margins required for excision of canine OMMs.

A multi-institutional retrospective descriptive study was conducted, involving two referral centres and a veterinary pathology laboratory. Cases of oral melanoma were identified by electronic database searches. Histologic diagnosis, surgical margin and histologic margins were required for inclusion. Tumours were categorised based on surgical margin width (Group A: ≤ 10 mm, Group B: 10-15mm, and Group C: > 15 mm). Debulking surgeries were not included. A deep margin of bone or fascia was required for Groups B and C, except when full-thickness excision was performed (e.g. lip/cheek).

29 tumours were included (26 OMMs and three melanocytomas). For the OMMs, there were 17 in Group A, seven in Group B, and two in Group C. Tumours in Groups B and C had the required deep margins. Complete histologic margin rates were 58.8% (10/17), 100% (7/7) and 100% (2/2) for Groups A, B, and C, respectively. The three melanocytomas fit in Group A and 100% (3/3) had complete histologic margins.

Results suggest that a 10-15mm wide margin and a deep margin of bone or fascia (or full-thickness tissue excision) are adequate for complete excision of canine OMMs. Narrow excision (≤ 10 mm margins) appears to achieve complete excision in more than 50% of OMMs. Oral melanocytomas appear to be completely excised with ≤ 10 mm margins.

References

1. Bergman PJ, Selmic LE, Kent MS. Melanoma. In: Vail DM, Thamm DH, Liptak JM, editors. *Withrow & MacEwen's Small Animal Clinical Oncology*. 6th ed. Missouri (USA): Elsevier; 2020. p. 367–81.
2. Liptak JM, Lascelles DX. Oral Tumors. In: Kudnig ST, Séguin B, editors. *Veterinary Surgical Oncology*. 2nd ed. New Jersey (USA): John Wiley & Sons, Inc.; 2022. p. 182–264.
3. Polton G, Borrego JF, Clemente-Vicario F, Clifford CA, Jagielski D, Kessler M, et al. Melanoma of the dog and cat: consensus and guidelines. *Front Vet Sci* 2024;11. <https://doi.org/10.3389/fvets.2024.1359426>