

Debunking the Debulking Myth

I'll start with a story that I hear at least every two weeks from owners and/or veterinarians.

"My dog/patient had this lump/mass and we tried to take it off but there were all of these nerves/vessels/tendons/joints in the way and/or not enough skin to close, so we just debulked it. It came back. What do we do now?"

What is debulking anyway? "Incomplete removal of a tumor (planned or unplanned)." It is commonly performed but rarely indicated (Small Animal Clinical Oncology, Withrow & Vail, 4th Ed.)

Never say never, but I am close to saying **"Never go into a mass removal with the mindset of 'debulking' it"-- waste of time, money, and most importantly, patient morbidity.**

As always, when I form and state a medical opinion, I try to back it up with strong rationale (beyond, "because I said so!" 😊)

Rationale #1: The first surgery has the best chance of cure. The classic case illustrating this concept is the vaccine-induced fibrosarcoma in cats. Several well documented publications clearly characterize this fact with this tumor. Most neoplasia follows this tenet.

Rationale #2: There are very few vessels, nerves, tendons, joint capsules that can't go the way of the histo jar. If you can name them (or should be able to name them!), maybe you pause, but still, most stuff can be removed *en bloc* with the mass. Seriously though, this is a primary determiner answering the question, "should I cut or refer?" The knowledge and experience component of folks who focus on surgery is just as pertinent as the hand skills component. I know for a fact that I am much more aggressive during my resections than most primary care providers with whom I work (they tell me so with a 'gasp' as they watch), and my patient morbidity remains highly acceptable to owners.

Rationale #3: Skin should not be "the" deciding factor for margins. We have a very strong contingent of very low tech solutions for the resulting gapping skin defects present once the tumor is lifted out of our field. I'll put a very loosely determined number of 75% on the portion of "what now" skin options that are straightforward, relatively easy, and highly acceptable to owners.

Chief among these is good old second intention healing. Why not leave an open wound after surgical resection? Seriously, why not? Is there some surgical doctrine that states, "Ye shall chose all skin incisions with sutures."? I can count on more fingers and toes than I own the number of cases I have managed with second intention healing with patient and owner success. All it takes is quality bandaging and bandage management, and 6 weeks (give or take).

Next in our low tech line up is full thickness skin grafts. Sounds all scary. But, really it's not. The simplest route is skin punches. Punch biopsy skin, trim SQ to follicles in dermis, punch holes in granulation tissue (1-2wk post surgical resection), put skin punch in hole, +/- interrupted suture. Quality bandaging and bandage management is essential. The resultant scar/wound bed will have more substance and less contracture if provided with some additional skin components, and not left with just thin epithelium and fibrosis. Large grafts are a wee-bit more demanding, but not terribly so.

And finally, skin flaps round out our skin closure options. These short cut the healing process and bandaging timeline by bringing in actual skin and its own blood supply. They range in complexity from tube flaps (way low tech) to direct flaps (creativity required) to axial pattern flaps (read the recipe and follow the map).

All of the above can be applied later if you get in deep and “can’t close it”. Always, always, ALWAYS, discuss with owners the concept that getting rid of a skin/SQ mass is a two-step process. (In human medicine, it is commonly a two-surgeon process, literally.) One step/surgeon removes the mass with clean margins. Second step/surgeon manages the resultant hole (does NOT, necessarily, “close the skin wound”). Changing your mindset and client discussions to this concept will serve your patients, clients and (importantly) yourself quite well.

Rationale #4: Is two weeks, or three months or one year “enough” time before it is back, ulcerated, smelly, draining? When leaving visible, gross disease behind, this is a reality to discuss with owners. And if your goal is 3 months, leaving the tumor alone might be the kindest option for the patient; surgery hurts. Know what the goals are and present a rational and informed list of potential scenarios for the owners as they contemplate their decision.

Rationale #5: If your rationale for proceeding with “just” a debulking can debunk the above four issues, then have at it. But if you have not thought thru each and discussed each thoroughly with the owner, then please question your motivation for doing the procedure.

Owners often think any surgery is a cure. This is clearly not true in the case of neoplasia, and we need to make sure they understand this. Owners also think that all surgery is created equal. This is clearly not true either. We have options now in our profession; it behooves all of us to offer diagnostics and therapeutics that are available and flavor that discussion with risk:benefits of each.

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