Commentary: “Can We” Versus “Should We”: The Defining Dilemma of Mesothelioma Surgery

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Central Message: Just because we can doesn’t mean we should – the defining dilemma of mesothelioma surgery, and what to do about it.

Central Picture Legend: Joseph S. Friedberg, MD FACS

Surgery for mesothelioma remains one of the most controversial topics in oncology, and this important report by the Brigham group contributes to the controversy. Curative intent mesothelioma operations are amongst the largest in all of surgery but . . . wait for it . . . there’s no Level I evidence supporting it as a treatment. That said, there is compelling evidence that some patients do survive significantly longer with these colossal palliative operations than would be expected without them. Who are those patients? They are typically highly selected epithelioid patients undergoing aggressive multimodal treatments that yield median overall survival rates (OS) in the three-year range – approximately twice as long as the 18-month OS with standard-of-care systemic treatments.¹⁴ For those patients, assuming you can figure out who they are, “If you can, then you probably should.”

What about the nonepithelioid patients in this study? The Brigham group⁵ clearly establishes, “Yes, you can,” with a high macroscopic complete resection (MCR) rate and an excellent safety profile. They report an OS of 15.1 months for their patients, 16.7 months with MCR and 6 without MCR. Checkmate 473 was a prospective trial of 605 “unresectable” patients, randomized to receive standard chemotherapy versus immunotherapy.⁴ Checkmate does not define “unresectable,” but we can safely assume they were not more robust than those
in this surgical trial. The CheckMate OS for the nonepithelioid patients was 18.1 months with immunotherapy, establishing it as a new standard of care. The Brigham group points out that this immunotherapy was not an approved treatment during the 11 years of their study, and reference the 8.8 month OS in the CheckMate chemotherapy arm as the reference to support the claim of “prolonged survival” with surgery. But that was then and this is now, so the current answer to, “Should we,” is probably, “No.” But this study does support the contention that surgery may contribute to OS, in combination with the best systemic therapies. So how do we revisit, “Should we?”

Mesothelioma is currently incurable and portends the one of the shortest life expectancies of any malignancy. Study of surgery for mesothelioma is extremely challenging. Surgical techniques are highly variable, adjuvants are highly variable, surgical nomenclature and reporting are highly variable, the cancer itself is highly variable, and there is no “common denominator” for attempting to rigorously compare series as the current staging system does not include two of the most important prognosticators – subtype and tumor volume. Attempting to compare results and draw conclusions between different surgical reports is maddening – apples and oranges. On top of that, the cancer is extraordinarily rare, and only a small fraction of the patients undergo surgery-based treatments. The Brigham group has firmly established, “Yes, we can,” but now, if we really want to answer if we should, then there will need to be an international collaboration toward standardizing all of the controllable variables surrounding surgical treatment of mesothelioma and to collaborate on prospective trials. Only then can we truly answer, “Should we?”
References


