



Influence of Pleurectomy and Decortication in Health Related Quality of Life among patients Diagnosed with Malignant Pleural Mesothelioma

Adrian E Rodrigues and Wickii T Vigneswaran*

Department of Thoracic and Cardiovascular Surgery, Loyola University Medical Center, USA

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Editorial

Malignant Pleural Mesothelioma (MPM) is a dismal disease, and no medical professionals that treat this disease disagree on its direness. What does remain disagreeable however is identifying the most effective treatment course for each case [1]. Most treatment considerations follow a multimodality approach whereby surgery, radiation and chemotherapy are administered [1]. The disparities between the most effective treatment selection that are more so debated surround the surgical procedure-either selecting one surgical approach over another or avoiding surgery all together. Nevertheless what has remained consistent in the literature is that Pleurectomy and Decortication (PD) has superior postoperative morbidity and survival rates when compared to Extra Pleural Pneumonectomy (EPP) in selective cases [2-4]. Another advantage in PD is that it shows a lower reoperation rate and has the benefit to operate on patients' with decreased physiologic reserve [4]. Both the benefits of a PD along with the disagreements of the best treatment approach for MPM is what directed the idea to create a Quality of Life (QoL) study with patients' undergoing a PD.

The quality of life tool that we used was the EORTC QLQ-C30 questionnaire which contains three main categories. The first is a principal domain called global health/QoL, and the remaining two are a functional scale and symptom scale. Both the functional and symptom scales have multiple single item variables that influence each scale's score. In our study, and in this commentary, we will be commenting interchangeably from both single variable outcomes along with scale and global health outcomes.

The main goal of our study was to identify the baseline (prior to surgery) Health-Related Quality of Life (HRQoL) of patients' selected for a PD, and compare it against subsequent postoperative HRQoL scores. At baseline, patients' with Performance Status (PS) scores of zero showed increased functional and decreased symptom scales when compared to those with PS scores of one or two. Those with epithelioid histology also showed favorable baseline scores under functional and symptom scales. Patients' with tumor volumes under 600 mL demonstrated positive baseline physical and role functioning single item variables.

The first month after the surgical procedure demonstrated the poorest results and are likely consequential from the early stages of healing and systemic follow-up treatment. Global health along with most of the variables under the functional scale decreased with the exception of the cognitive variable. Under the symptoms scale, pain, fatigue and insomnia were consistently poor as well during the first follow-up month.

The subsequent 4 to 5 and 7 to 8 month follow-ups however showed progress and were therefore encouraging. The emotional variable showed consistent growth while physical, cognitive, social and role variables approached baseline values. Under the symptoms variables, appetite, insomnia and constipation also showed progressive improvements, while dyspnea and pain reached their baseline values at the 7 to 8 month follow-up. As depicted by the changes in quality of life graph, global health and the functional scale showed a steady improvement with time, while the symptoms scale depicted less symptomology progressively. The positive progression ceased at 10 months to 11 months and began to course in the opposite direction. This finding can be explained by

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*Correspondence:

Wickii T Vigneswaran, Professor
and Director of Thoracic Surgery,
Department of Thoracic and
Cardiovascular Surgery, Loyola
University Health System, Building
110 Suite 6256, 2160 S First Avenue,
Maywood, IL 60153, Illinois, USA, Tel:
(708) 327 2449, Fax: (708) 327 2382;
E-mail: wickii.vigneswaran@lumc.edu

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remembering that regardless of the treatment modality the prognosis in MPM remains poor.

Patients with MPM, who harbor non-epithelioid histology, have tumor volumes larger than 600 mL or contain PS scores of one or above, generally have the poorest prognosis regardless of treatment selection. In our study however, non-epithelioid histology patients' illustrated improvement in appetite, while this same group along with those with elevated PS and tumor volume showed no deterioration at the first month follow-up. Additionally, these three groups showed improvement in HRQoL across the follow-up months.

In terms of survival the study reflected a median of 15.21 months, with overall survival differing between PS, histology and tumor volume. The best survival was among epithelioid histology and tumor volumes less than 600 mL. This isn't unique to our study, many physicians who have incorporated a PD or extended PD in their multimodality treatment approach have shown increased survival, and it is believed this result is attained because a complete macroscopic resection is achieved and is accompanied with a bimodality or trimodality treatment course [5-7].

Overall the study did fine improvement in the HRQoL in MPM patients following a PD. This disease obviously has a poor prognosis, and even among those who survive the disease fines themselves dependent on continued support [8]. What our study has mainly concluded is that patients will benefit from a PD by improving their HRQoL and therefore it should not be dismissed by medical professionals when speaking to patients' about their treatment options.

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