The effect of surgical technique on quality of life in patients with pleural malignant mesothelioma.

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Perspective

Past asbestos exposure, either in the environment or at work, is frequently linked to Malignant Pleural Mesothelioma (MPM). Despite a range of multi-modal treatments such as tyrosine-kinase inhibitors, surgery and radiation, and platinum-based chemotherapy, the average survival diagnosis for individuals with MPM is about 15 months. Many immunotherapies are being evaluated for use, but more research is needed to determine their efficacy. Most patients receive palliative care because they are at an advanced stage of the disease and have multiple co-morbidities that preclude aggressive therapy from being used. As a short life is expected from the moment of diagnosis, the major objective of treatment is to control symptoms and improve the quality of life for these patients.

In a SEER (Surveillance, Epidemiology, and End Results) research, surgical therapy was found to be an independent predictor of prolonged life in 22% of MPM patients. There is still debate about which surgical method, Extrapleural Pneumonectomy (EPP) or Pleurectomy/Decortication (P/D), is more successful, resulting in higher survival rates, and has fewer complications. According to recent study, P/D may be somewhat more beneficial in terms of both short and long term survival, but the differences are not significant. To assist patients in making informed judgments about whether therapy is best for them, it is necessary to examine how EPP and P/D influence quality of life. The current study entailed conducting an analytic evaluation of existing articles that investigated the influence of surgical therapy for MPM on Quality of Life (QoL) in patients treated with EPP vs P/D.

This research demonstrates that both EPP and P/D had a substantial impact on QoL measures such as lung function parameters, physical symptoms, and physical and social functions 6 months following surgery. Despite the fact that just a few studies have directly compared the two treatments, it appears that P/D patients had better QoL results. This is not unexpected considering that EPP has been linked to higher morbidity more frequently than P/D. It is conceivable that the surgical technique was chosen based on comorbidities and clinical reasons, which might potentially be responsible for some of the QoL results seen. Indeed, patients who have been advised to undergo the P/D treatment rather than the EPP operation frequently have more acute comorbidities, making them less likely to be candidates for EPP, confirming the validity of the findings regarding better QoL outcomes in P/D patients.

Because the majority of studies in this analysis were stratified by cancer stage, arguments from P/D opponents that the increased tumour load of EPP patients may have a detrimental influence on QoL measures are invalid. Treasure [2015] emphasises in an updated supplement that EPP provides no advantage in terms of survival or QOL, based on evidence from large cohort studies. Treasure concludes that the EPP process should be a thing of the past.

This study demonstrates the need of including QoL measurements into MPM studies in order to better understand the relationship between MPM surgical resections and QoL. Despite the fact that there is a large body of literature on MPM surgery, only 12 datasets included QoL measurements (12 datasets). Some of the studies in this review used datasets with extremely small sample sizes, highlighting the necessity for bigger cohort studies of MPM surgery patients.

Furthermore, assessing QoL from a standard point of measurement was difficult since many of the instruments used to examine QoL were highly diverse and incomparable. There was also a wide range in the time periods at which QoL data was gathered, and not all studies included baseline data, making it impossible to measure changes in QoL over time. Many other therapies, such as chemotherapy and radiation, were given to patients, but their particular impact on quality of life metrics was not recorded. Many variables within the trials, including as stage, comorbidities, and age, showed significant variability. It is probable that the VATS technique (Video-Assisted Thoracoscopic Surgery) was employed instead of the standard thoracotomy in many of the resections documented in the research. This variation in method may have an impact on QoL, however it was not documented. Furthermore, more QoL data was discovered for P/D patients than EPP patients (356 to 167, respectively), and the findings may have varied if more EPP data had been gathered.

Furthermore, missing patient data might be the result of a failure to follow-up for a variety of reasons. Patients who are very ill or who are doing considerably better than most, for example, may be excluded from clinical trials. Studies that take these directional biases into account may produce a more accurate assessment of the surgical impact on QoL.

In conclusion, while this study indicates that P/D had superior QoL results for MPM surgery patients in general, additional thorough cohort studies are required. When making surgical decisions, MPM patients and surgeons might benefit tremendously from this expanded body of information

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