

Improved Outcomes in Management of Malignant Pleural Effusions

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Problem:

Malignant pleural effusions (MPEs) commonly occur in patients with advanced carcinoma which significantly compromise their quality of life. This project focused on developing a cost-effective treatment plan that emphasized patients' comfort, symptom control, and convenience.

Evidence:

A review of the literature revealed the safety and efficacy of using a tunneled chest drain but no evidence if symptom control, functional status, or overall patient satisfaction were impacted.

Strategy:

A multidisciplinary team was formed to implement and evaluate an improved treatment plan that included the use of a tunneled chest drain instead of standard chest drainage. A prospective study of 20 consecutive patients referred to interventional radiology for treatment of MPE was undertaken with a retrospective control group. The prospective group kept diaries that described their overall comfort and satisfaction.

Practice Change:

An ambulatory-based management plan using a tunneled chest drain was created. By selecting a tunneled drain designed for long term use, patients could intermittently drain their effusions when the MPE re-accumulated instead of undergoing repeated in-hospital chest drainage procedures. Pleurodesis, via the tunneled drain instead of a standard chest tube, was also offered.

Evaluation:

Outcomes measured included treatment costs, length of stay, number of procedures, functional status and pain ratings. Anecdotal data describing patient satisfaction was obtained from patient diaries and interviews.

Results:

There was a significant reduction in length of stay and treatment costs in the intervention group without any negative impact on quality of life indicators (functional status and pain). Qualitative data indicated that, for patients, the ability to remain at home while managing their MPE was an overwhelmingly positive experience.

Recommendations:

Ambulatory management of MPE should be considered for control of symptoms for patients who want to avoid hospitalization and who have caretakers and other home-based resources necessary for their palliative care needs.

Bibliography:

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