Catheter Tract Metastasis in Mesothelioma Patients with Indwelling Pleural Catheters: A Retrospective Cohort Study

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Abstract

Background: Use of indwelling pleural catheters (IPC) for the management of symptomatic pleural effusions in patients with mesothelioma has increased in popularity. An important concern with this approach is the potential for the development of catheter tract metastasis (CTM). Objectives: To determine the incidence of IPC-related CTM in patients with malignant pleural mesothelioma (MPM). Methods: In this single-center retrospective cohort study, patients with biopsy-confirmed MPM who had an IPC inserted between May 2006 and July 2017 were identified from a prospectively collected database. Thoracic CT scans following IPC insertion were reviewed to assess for evidence of CTM. Patients were followed until death or last documented patient encounter with a minimum of 6-month follow-up. Results: A total of 90 patients were included in the cohort. CTM was identified in 23 of 90 patients (26%). Median time from IPC insertion to CTM was 408 days (interquartile range 196–721 days). Medical thoracoscopy at the time of IPC insertion did not lead to a significantly increased odds of CTM (OR 2.30; 95% CI 0.66–7.94; p = 0.19). Incidence of CTM was not different between mesothelioma subtypes (p = 0.09). Patient-reported dyspnea scores were improved following IPC insertion in 80% of patients. Conclusions: CTM was identified in over a quarter of MPM patients when follow-up imaging was reviewed. Treating physicians should be cognizant of the possibility of CTM at the site of prior IPC.

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The Hospital and Patient Burden of Indwelling Pleural Catheters: A Retrospective Case Series of 210 Indwelling Pleural Catheter Insertions

Background: Indwelling pleural catheters (IPC) offer an alternative to talc pleurodesis in recurrent effusion, especially in patients wishing to avoid hospitalization. Two randomized trials have demonstrated reduced time...

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