Tunneled Pleural Catheter Placement with and without Talc Poudrage for Treatment of Pleural Effusions Due to Congestive Heart Failure

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This single center (Beth Israel Hospital Boston, MA) retrospective study involved 43 procedures (36 patients) performed over a (10) year period (2005-2015). (15) patients were in Group 1 (Tunneled pleural catheter inserted during medical thoracoscopy and talc poudrage) and (28) patients were in Group 2 (Tunneled pleural catheter insertion technique and drainage method). The mean age of the patients was 82.5 years (range 61-97). (52.7%) of the patients were women.

All of the patients exhibited improved dyspnea after pleural intervention. Overall, successful pleurodesis was achieved in 44.2%, and catheters were removed in44.2%. After the intervention, NYHA mean score decreased from 2.49 (group 1 = 2.15; group 2 = 2.67) to 1.82 (group 1 = 1.69, group 2 = 1.90). Pleurodesis was achieved more frequently in group 1 (80%) than Group 2 (25%). The median time to catheter removal of all catheters (both groups) was 20 days (range, 2–205 d), with Group 1 11.5 days (range 2-22) and Group 2 66 days (range 31-205). Each group had (3) adverse events.

In this retrospective tunneled catheter placement was found to be feasible and often efficacious for patients with symptomatic, refractory pleural effusions caused by CHF. Pleurodesis was achieved more frequently when catheter placement was combined with thoracoscopy and talc poudrage (Group 1). However the patients in this treatment group were younger and exhibited a lower baseline NYHA score.

Among the limitations associated with the study were: retrospective cohort without a control, inherent referral and selection bias.