Palliation and pleurodesis in malignant pleural effusion: the role for tunneled pleural catheters.

Suzuki K, Servais EL, Rizk NP, Solomon SB, Sima CS, Park BJ, Kachala SS, Zlobinsky M, Rusch VW, Adusumilli PS.

Division of Thoracic Surgery, Memorial Sloan-Kettering Cancer Center, New York, NY

Abstract

INTRODUCTION: Despite increasing use of tunneled pleural catheters (TPCs), their efficacy as a definitive procedure for achieving palliation or spontaneous pleurodesis (SP) in the management of malignant pleural effusion (MPE) remains unclear. In the largest TPC series to date, we evaluate the efficacy for palliation and review the rate and predictors of SP.

METHODS: Retrospective review of 418 TPCs (355 patients) over 2 years (September 2007-September 2009) was performed. Palliation was deemed successful when the patient did not require any other subsequent effusion-directed drainage procedure. SP was defined as satisfying the following criteria: (a) TPC removal without need for further effusion-directed intervention during the patient's lifespan and (b) no evidence of effusion reaccumulation by clinical and radiographic evidence at 1-month postremoval follow-up.

RESULTS: After TPC placement, no subsequent effusion-directed procedure was required for 380 of 418 (91%). SP was achieved after only 26% of TPCs (110 of 418), in which the median time to catheter removal was 44 days. Neither demographics nor primary tumor type predicted SP. In patients selected for TPC placement in the operating room, SP occurred in 36% (39 of 107), with 45% in loculated MPE (13 of 29, p = 0.014). Complications occurred after 20 TPCs (4.8%), with none occurring after bedside placement.

CONCLUSION: TPC placement is safe and provides durable palliation, most often obviating the need for subsequent procedures in MPE patients. TPC, however, remains suboptimal at achieving pleurodesis.

PMID:21325982

[PubMed - indexed for MEDLINE]

Link to article: http://journals.lww.com/jto/Fulltext/2011/04000/Palliation_and_Pleurodesis_in_Malignant_Pleural.15.aspx