Letter to the Editor

# Symptomatic malignant pericardial effusion due to advanced pericardial malignancies: a palliative approach

**Nauman Khalid[1], Lovely Chhabra[2], Sarah Aftab Ahmad[3], David H. Spodick[4]**

[1]Department of Cardiovascular Medicine, Hartford Hospital, University of Connecticut Health Center, Hartford, CT, USA; [2]Hartford Hospital, University of Connecticut School of Medicine, Hartford, CT, USA; [3]Texas Tech University Health Sciences Center, Lubbock, TX, USA; [4]Saint Vincent Hospital, University of Massachusetts Medical School, Worcester, MA, USA

*Correspondence to:* Nauman Khalid, MD. Department of Cardiovascular Medicine, Hartford Hospital, University of Connecticut Health Center, 80 Seymour Street, Hartford, CT (06102), USA. Email: khalid@uchc.edu.

Submitted Jan 30, 2015. Accepted for publication Mar 11, 2015.
doi: 10.3978/j.issn.2072-1439.2015.04.05
**View this article at:** http://dx.doi.org/10.3978/j.issn.2072-1439.2015.04.05

***Dear Editor,***

We read with great pleasure the manuscript by Gong *et al.* published in a recent issue of the *Journal of Thoracic Disease*. Authors describe a rare pericardial neoplasm—primary malignant pericardial mesothelioma (PMPM)—complicated by superior vena cava compression and pericardial constriction (1). They did a commendable job in describing the diagnostic and treatment challenges related to their case. We would however like to highlight the palliative therapeutic approach which remains an extremely important treatment aspect in such cases.

Malignant pericardial effusion (MPE) is an important complication of advanced pericardial malignancy and contributes significantly to the morbidity and mortality. It poses a great therapeutic challenge to the clinicians due to the advanced nature of the underlying disease and its associated poor prognosis. There is no consensus on the best treatment option for MPE due to the lack of randomized control studies on this subject. We recently described palliative approaches for symptomatic MPEs which would be ideal for these groups of patients who especially have predictably limited survival (2). Although surgical resection combined with chemotherapy and radiotherapy remains the optimal therapeutic option for PMPM (as highlighted by the authors), emphasis should also be provided to the prevention of recurrences of pericardial effusions, symptom relief and improvement in quality of life (3).

Jama *et al.* compared different treatment options for MPEs including pericardiocentesis, extended catheter drainage, pericardial sclerosis, surgical modalities (pericardial fenestration, pericardiectomy and pericardio-peritoneal shunt insertion) and percutaneous balloon pericardiotomy (4). They concluded that surgical decompression of the pericardium had the best overall success rate of 93.5% with fewer complications (4.7%) (4). Çelik *et al.* found combined systemic chemotherapy and pericardial window formation to be a better option with improved survival rates when compared with systemic chemotherapy plus drainage and systemic chemotherapy alone (5). Percutaneous balloon pericardiotomy has also been proposed by some experts as the initial and definitive treatment for treating MPE especially in patients with advanced oncologic disease (6). The likely reason for recurrent or persistent symptoms in the presented case is not clearly described however presumably may be related to recurrent pericardial effusions. In fact recurrent serosal inflammation has been postulated to be a possible condition predisposing to advanced malignant evolution in PMPM (7).

It is evident that practices differ widely on the treatment of MPEs due to lack of large prospective studies on comparative efficacy of different therapeutic options. In our opinion, clinicians should be aware of these different treatment strategies in order to make an appropriate therapeutic choice since palliative care remains an important treatment facet in such patients and especially targets at reduction of recurrent symptoms and improvement in quality of life.

## Acknowledgements

Dr. David Spodick receives royalties from his textbook, "The Pericardium: A Comprehensive Textbook (Fundamental and Clinical Cardiology), Marcel Dekker, New York 1997". *Disclosure:* The authors declare no conflict of interest.

## References

1. Gong W, Ye X, Shi K, et al. Primary malignant pericardial mesothelioma-a rare cause of superior vena cava thrombosis and constrictive pericarditis. J Thorac Dis 2014;6:E272-5.
2. Khalid N, Chhabra L, Spodick DH. Malignant pericardial effusion: different therapeutic perspectives. J Thorac Cardiovasc Surg 2015. (In Press).
3. Khalid N, Chhabra L, Ahmad SA, et al. eComment. Different treatment strategies for symptomatic malignant pericardial effusion. Interact CardioVasc Thorac Surg 2014;19:1019-26. Available online: http://icvts.oxfordjournals.org/content/19/6/1019.full/reply#icvtsurg_el_1802
4. Jama GM, Scarci M, Bowden J, et al. Palliative treatment for symptomatic malignant pericardial effusion. Interact Cardiovasc Thorac Surg 2014;19:1019-26.
5. Çelik S, Lestuzzi C, Cervesato E, et al. Systemic chemotherapy in combination with pericardial window has better outcomes in malignant pericardial effusions. J Thorac Cardiovasc Surg 2014;148:2288-93.
6. Ruiz-García J, Jiménez-Valero S, Moreno R, et al. Percutaneous balloon pericardiotomy as the initial and definitive treatment for malignant pericardial effusion. Rev Esp Cardiol (Engl Ed) 2013;66:357-63.
7. Rizzardi C, Barresi E, Brollo A, et al. Primary pericardial mesothelioma in an asbestos-exposed patient with previous heart surgery. Anticancer Res 2010;30:1323-5.

**Cite this article as:** Khalid N, Chhabra L, Ahmad SA, Spodick DH. Symptomatic malignant pericardial effusion due to advanced pericardial malignancies: a palliative approach. J Thorac Dis 2015;7(4):E102-E103. doi: 10.3978/j.issn.2072-1439.2015.04.05

 