that CT in high-risk subjects guarantees better overall and cancer-specific survival than chest radiograph.

Should we adopt chest radiography? Probably not, considering that, as suggested by Crabtree and colleagues,¹ results could have been influenced by sample size. Also, in the CT group 20% of patients underwent subanatomic resection, whereas in the chest radiograph group this was required in only 8%. It is common opinion² that in stage I NSCLC populations, although sublobar resection is considered successful, wedge resection is associated with lower survival and higher recurrence rate than anatomic resection. This bias could have influenced results. Another bias could be represented by the technique adopted for lymphadenectomy. Unfortunately, the authors do not report if they performed sampling or systemic dissection in every patients. In fact, we know that when lymphadenectomy is incomplete, it may lead to N downstaging and influence survival.³

Without any prospective data supporting chest radiograph surveillance, we think that CT follow-up should be always adopted, but further study to determine the best type of CT scan and its timing should be encouraged.

Alessandro Baisi, MD^a
Federico Raveglia, MD^a

Ugo Ciuffi, MD, PhD^b

^aThoracic Surgery Unit
Azienda Ospedaliera San Paolo
University of Milan
Milan, Italy

^bDepartment of Surgery
University of Milan
Milan, Italy

References

1. Crabtree TD, Puri V, Chen SB, Gierada DS, Bell JM, Broderick S, et al. Does the method of radiologic surveillance affect survival after resection of stage I non-small cell lung cancer? *J Thorac Cardiovasc Surg.* 2015;149:45-53.
2. Baisi A, De Simone M, Cioffi U, Raveglia F. Should pulmonary lobectomy be replaced by sublobar resection in patients with stage I non-small cell lung cancer? *J Thorac Cardiovasc Surg.* 2014;147:1997-8.

3. Baisi A, Raveglia F, Rizzi A, Cioffi U. The role of lymphatic invasion in the management of patients with T1N0M0 pulmonary adenocarcinoma. *J Thorac Cardiovasc Surg.* 2014;148:1772.

<http://dx.doi.org/10.1016/j.jtcvs.2014.08.014>

MALIGNANT PERICARDIAL EFFUSION: DIFFERENT THERAPEUTIC PERSPECTIVES To the Editor:

We read with great pleasure the manuscript by Celik and colleagues.¹ The treatment of malignant pericardial effusions remains largely empirical because of the lack of large randomized control studies to determine the optimal treatment regimen for these conditions. In a large study, Celik and colleagues¹ commendably compared 3 different treatment modalities for malignant pericardial effusions: systemic chemotherapy plus pericardial window versus systemic chemotherapy alone versus systemic chemotherapy plus drainage. The efficacy of 2 alternate effective treatment modalities, however, namely percutaneous balloon pericardiotomy (PBP) and pericardiocentesis with prolonged catheter drainage, were not specifically evaluated in this study.

There is significant evidence to suggest that patients with recurrent symptomatic pericardial effusions secondary to malignant disease can be successfully treated with PBP, which is a minimally invasive procedure. Some experts suggest its use as an initial and definitive treatment modality for treating malignant pericardial effusions, especially in patients with advanced oncologic disease with predictably limited survival to relieve their symptoms and improve their quality of life.² PBP creates a direct pleuropericardial communication and is an alternative to creating a subxiphoid surgical window. It successfully prevents recurrent effusions in more than 80% of the cases³ and seems to be about 90% to 97% effective for large malignant pericardial effusions.⁴

Patients with pericardial malignancies are also prone toward the development of large and tamponading pericardial effusions, and PBP has been successfully used for relieving tamponade in such patients as well.⁵

Celik and colleagues¹ evaluated the role of pericardiocentesis, although it is unclear how many patients received extended or prolonged catheter drainage. A recent large study compared surgical pericardiotomy with “pericardiocentesis plus prolonged catheter drainage” in patients with symptomatic malignant pericardial effusions and found prolonged drainage to be a safe and effective treatment modality with a significantly lower rate of complications than surgical pericardiotomy.⁶ It can especially avoid the surgical risk and discomfort in patients with advanced pleuropericardial malignancies, and thus it may be a particularly better therapeutic option for patients with limited expected survival.^{6,7}

The treatment of malignant pericardial effusions often poses a challenge, and clinicians should thus be aware of these less invasive alternative treatment options, especially for patients with advanced malignancies and when the overall treatment goal is palliative care.

Nauman Khalid, MD^a

Lovely Chhabra, MD^b

David H. Spodick, MD, DSc^c

^aDepartment of Cardiovascular
Medicine

Hartford Hospital

University of Connecticut Health
Center

Hartford, Conn

^bHenry Low Heart Center

Hartford Hospital

University of Connecticut School of
Medicine

Hartford, Conn

^cSaint Vincent Hospital

University of Massachusetts Medical
School

Worcester, Mass

References

1. Celik S, Lestuzzi C, Cervasato E, Dequanter D, Piotti P, De Biasio M, et al. Systemic chemotherapy in combination with pericardial window has better outcomes in malignant pericardial effusions. *J Thorac Cardiovasc Surg*. April 18, 2014 [Epub ahead of print].
2. Ruiz-Garcia J, Jiménez-Valero S, Moreno R, Galeote G, Sánchez-Recalde Á, Calvo L, et al. Percutaneous balloon pericardiotomy as the initial and definitive treatment for malignant pericardial effusion. *Rev Esp Cardiol (Engl Ed)*. 2013;66:357-63.
3. Imazio M, Spodick DH, Brucato A, Trincherio R, Adler Y. Controversial issues in the management of pericardial diseases. *Circulation*. 2010;121:916-28.
4. Seferović PM, Spodick DH, Maisch B, Maksimović R, Ristić AD, Roberts R. *Pericardiology: contemporary answers to continuing challenges*. Belgrade: Science; 2000:427-38.
5. Ziskind AA, Pearce AC, Lemmon CC, Burstein S, Gimple LW, Herrmann HC, et al. Percutaneous balloon pericardiotomy for the treatment of cardiac tamponade and large pericardial effusions: description of technique and report of the first 50 cases. *J Am Coll Cardiol*. 1993;21:1-5.
6. Patel N, Rafique AM, Eshaghian S, Mendoza F, Biner S, Cercek B, et al. Retrospective comparison of outcomes, diagnostic value, and complications of percutaneous prolonged drainage versus surgical pericardiotomy of pericardial effusion associated with malignancy. *Am J Cardiol*. 2013;112:1235-9.
7. Tsang TS, Seward JB, Barnes ME, Bailey KR, Sinak LJ, Urban LH, et al. Outcomes of primary and secondary treatment of pericardial effusion in patients with malignancy. *Mayo Clin Proc*. 2000;75:248-53.

<http://dx.doi.org/10.1016/j.jtcvs.2014.08.014>

Notices of Correction

Re: Rieder E, Kasimir M-T, Silberhumer G, Seebacher G, Wolner E, Simon P, Weigel G. Decellularization protocols of porcine heart valves differ importantly in efficiency of cell removal and susceptibility of the matrix to recellularization with human vascular cells. *J Thorac Cardiovasc Surg*. 2004;127:399-405.

In the full-text online version of the article, Figures 2 and 3 are switched. Readers should refer to the PDF or print version of the article, which are both correct.

Re: Seery TJ, Sinha P, Zurakowski D, Jonas RA. Femoral vein homograft for neoaortic reconstruction in the Norwood stage 1 operation: A follow-up study. *J Thorac Cardiovasc Surg*. 2013;146:550-6.

In the above-mentioned article, Table 1 contained errors in the "Overall" column for the rows "Late mortality," "Interstage death (1 → 2)," and "Interstage death (2 → 3)." The entries should be as follows: Late mortality, 14 (13.1%); Interstage death (1 → 2), 4 (3.7%); and Interstage death (2 → 3), 6 (5.6%). The corrected table is reprinted on the next page.