Malignant Pericardial Effusions

To the Editor:

Dr. Cullinane et al report on the surgical management of malignant pericardial effusions. Surgical intervention is advocated with the caveat that “there are a number of different interventions ranging from catheter drainage to subtotal pericardiectomy available to clinicians seeking to offer palliation.” However, he does not discuss in his article, nor cite in the references, pericardial catheter drainage with intrapericardial sclerosis, which is a minimally invasive low-cost procedure just as effective and obviously less morbid than a pericardial window, either by anterior lateral thoracotomy, video thoracoscopic, or subxiphoid approaches. It has essentially replaced surgical drainage in many thoracic surgical oncologic practices. Although pericardiectomy may be required for constrictive pericarditis, benign pericardial effusions, or as a diagnostic biopsy, its use for malignant pericardial effusion is probably unnecessarily invasive.

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To the Editor:

Dr. Frankel has chided us for not including more information and references on percutaneous pericardial drainage and chemical sclerosis (PPDS). The reality of limitations on word count and citations required to keep journal articles of reasonable length make it impossible for authors to satisfy all readers. We did include the largest published series of pericardial drainage cases from the Mayo group, as well as three other references, and have discussed the relative merits of these techniques in more detail elsewhere. Although Dr. Frankel believes that PPDS is “just as effective and obviously less morbid” as well as less expensive than surgical techniques, there are only 140 patients in the three series he cites. Even in experienced hands, guided by echocardiography, there is a substantial risk of cardiac penetration during pericardiocentesis. Technical failure, pain, dysrhythmia, fever, infection, and cardiac arrest are described as complications of PPDS. Prolonged hospitalization is required for drainage of fluid and repeated sclerosant injections. Only 75% of effusions were controlled for >30 days, and median survival periods were only 98 days, 97 days, and 30 days in the series cited. These articles do not provide information on the success of this treatment in preventing recurrent pericardial effusion and tamponade beyond 30 days. We have provided information documenting a very low rate of pericardial effusion recurrence following surgical window techniques, including thoracoscopic pericardial window, based on a careful standardized follow-up protocol including monthly clinical examination, chest roentgenograms, and/or echocardiograms. This information can be used as a historical control in future PPDS studies. Perhaps with increased experience and refinement of techniques, PPDS may achieve equivalent success with surgical window drainage. The best approach to resolve this question will be a prospective study of surgical window vs PPDS.

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REFERENCES


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