

Percutaneous Versus Surgical Treatment of Hypertrophic Obstructive Cardiomyopathy: the Pendulum Continues to Swing

The recent article by Buegler and associates¹ on percutaneous transluminal septal myocardial ablation (PTSA) is quite timely, especially considering the simultaneous appearances of two articles in favor of surgical treatment of hypertrophic obstructive cardiomyopathy (HOCM) in two other leading cardiological journals.^{2,3} As Buegler and associates pointed out in their paper, since Sigwart's original report of PTSA in 1995, several publications confirming the efficacy and safety of the procedure have appeared all around the world, including China.^{4,5} It was particularly gratifying to see how a world-renowned cardiac surgeon in an editorial accompanying one of the surgical papers³ concluded that "Available evidence has shown that both surgical and alcohol ablation can produce significant improvement in symptoms, hemodynamic status, and structural abnormalities in symptomatic patients."⁶

It is important to bear in mind that surgical treatment of HOCM has a near 50-year history since Cleland's successful excision of "subaortic hypertrophic muscle" using open heart surgery in 1958,^{7,8} as compared to PTSA, which has only a 10-year history since Sigwart's initial report. As Yacoub concluded, "There is a pressing need for initiating a prospective randomized trial to establish the place of each form of therapy rather than allow the pendulum to continue to swing."⁶ At the very least, as I suggested several years ago, the time has come to establish a prospective international registry to assess the efficacy, safety and long-term results of the percutaneous procedure.¹⁰

References

1. Buegler JM, Franklin J, Nagueh SF. Alcohol septal ablation therapy for patients with hypertrophic obstructive cardiomyopathy. *J Methodist DeBakey Heart Center*. 2005;1(3):2-3.
2. Ommen SR, Maron BJ, Olivetto I, et al. Long-term effects of surgical septal myectomy on survival in patients with obstructive hypertrophic cardiomyopathy. *J Am Coll Cardiol*. 2005;46:470-6.
3. van der Lee C, ten Cate FJ, Geleijnse ML, et al. Percutaneous versus surgical treatment for patients with hypertrophic obstructive cardiomyopathy and enlarged anterior mitral leaflets. *Circulation*. 2005;112:482-8.
4. Sigwart U. Nonsurgical myocardial reduction for hypertrophic obstructive cardiomyopathy. *Lancet*. 1995;346:211-14.
5. Li ZQ, Cheng TO, Zhang WW, et al. Percutaneous transluminal septal myocardial ablation for hypertrophic obstructive cardiomyopathy. The Chinese experience in 119 patients from a single center. *Im J Cardiol*. 2004;932:197-202.
6. Yacoub MH. Surgical versus alcohol septal ablation for hypertrophic obstructive cardiomyopathy. The pendulum swings. *Circulation*. 2005;112:450-2.
7. Goodwin JF, Hollman A, Cleland WP, Teare D. Obstructive cardiomyopathy simulating aortic stenosis. *Br Heart J*. 1960;22:403-14.
8. Cleland WP. The surgical management of obstructive cardiomyopathy. *J Cardiovasc Surg (Torino)*. 1963 Aug;45:489-91.
9. Cheng TO. Time for a prospective national or international registry. *Cather Cardiovasc Diagn*. 1997;42:234.
10. Cheng TO. Transcatheter alcohol septal ablation for hypertrophic obstructive cardiomyopathy. *Circulation*. 1999;100:1252.

-Tsung O. Cheng from George Washington University Medical Center, Washington, D. C.

We appreciate Dr. Cheng's letter to the editor and agree wholeheartedly with the need for initiating a prospective randomized trial between alcohol septal ablation (ASA) and surgical myectomy in medically refractory HOCM. The greatest challenge in performing the trial, however, is getting patients who are willing to be randomized to the surgical arm. It is interesting to note that the popularity of ASA continues to grow.

We also agree with the need with for an international registry. The information collected will be invaluable in assessing the efficacy, safety and long-term results of the procedure.

*John Buegler, M.D.
Sherif Nagueh, M.D.*

*Methodist DeBakey
Cardiology Associates
6550 Fannin Street
Suite 1901
Houston, TX 77030
713-441-1100 Office
713-790-2643 Fax*