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Commentary: Regionalization = Excellence

Carl L. Backer, MD

As I read the manuscript submitted by Dr Ramgren and colleagues from Lund, Sweden, I noted that their review of infants with atrioventricular septal defect (AVSD) began in 1993.¹ Given my interest in the regionalization of care, I recognized that was exactly 1 year after Sweden centralized the care of children with congenital heart disease from 4 to 2 dedicated centers.²

Suddenly this review became not simply another article on surgical techniques and results, but possibly an outcomes analysis of the regionalization strategy embarked upon in 1992. At that time Sweden (population 10 million) centralized congenital heart surgery from 4 centers to 2 centers; 1 in Lund and 1 in Göteborg. What was the effect of this decision on children born with an AVSD and treated in Lund, Sweden?

What I found was that the outcomes for patients with an AVSD at this center clearly supports the hypothesis that regionalization of care improves results. The results were superb! Their nearly 30-year experience with more than 300 patients with an AVSD resulted in an operative mortality of only 1%. The freedom from left atrioventricular valve-related reoperation was remarkable at 93% at 20 years. Finally, there was no difference in outcomes between young infants (mean age, 1.6 months) versus older infants (mean age, 5.1 months). Those are truly some of the finest results I have ever seen reported for AVSD repair!

The authors themselves point out that continuous improvements in pre- and postoperative management secondary to Sweden's centralization strategy facilitated the improved clinical outcomes. The authors note that the 1992 centralization of Sweden's pediatric cardiac surgery centers not only provided sufficient patient volumes but also facilitated recruitment of highly trained staff at all levels of support to ensure the highest possible standards of care.

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CENTRAL MESSAGE

The excellent results with surgical repair of AVSD in this review validates the prescient decision to regionalize care of children with congenital heart disease in Sweden from 4 to 2 centers in 1992.

There are many lessons that can be learned from the detailed surgical strategies the authors review from their 30-year experience. The results support early repair even at the age of 6 weeks, staged repair for patients with AVSD and coarctation of the aorta, and intraoperative focus on the left AV valve. For me, the most important message is that the regionalization of care that began in Sweden in 1992 has resulted in true excellence in outcomes for the children of Sweden with congenital heart disease. This accomplishment should be carefully noted as we consider various strategies, including regionalization, to improve the outcomes of children born with congenital heart disease.

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