dispersed, especially in patients with ongoing dissection beyond 24 hours. We are therefore concerned that even placement of the cannula into the true lumen under epiaortic scanning could result in the same dilemma of potentially dispersing thrombi via the wide open connection to the false lumen in the ascending aorta. Thus, we do believe that our new approach might be a safer way toward adequate antegrade perfusion of the cerebrum during the cooling phase.

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Reference

1. Inoue Y, Ueda T, Taguchi S, Kashima I, Koizumi K, Takahashi R, et al. Ascending aorta cannulation in acute type A aortic dissection. Eur J Cardiothorac Surg. 2007;31: 976-9

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Better surgical prognosis for patients with Down Syndrome: To the Editor:

In a recent issue, we read the interesting paper by Seifert et al. on risk of death during hospitalization for pediatric cardiac surgery.1 In their multicentric study, the authors unequivocally demonstrated that Down syndrome is associated with a significant lower mortality after cardiac surgery for congenital heart defects, affirming that "the effect of Down syndrome on immediate outcome is not clear."1

Although previous studies have suggested that patients with this syndrome have an increased risk of mortality after repair of ventricular septal defect or atrioventricular canal, recent papers have shown that the presence of Down syndrome did not increase the surgical mortality in children with ventricular septal defect² or with tetralogy of Fallot.³ Moreover, in patients with partial⁴ and complete⁵ atrioventricular canal (very frequent heart defects in children with trisomy 21), the Down syndrome is associated with significantly lower mortality and morbidity after cardiac surgery.

These surgical results are probably due to the peculiar anatomic cardiac pattern of patients with atrioventricular canal and Down syndrome, including a lower prevalence of left-sided obstructions, right ventricular dominance, and additional anomalies of the mitral valve. 6 We can suggest that the effect of best results on children with atrioventricular canal^{4,5} could influence all surgical results in patients with Down syndrome.¹

In conclusion, in spite of the tendency to infections and early pulmonary hypertension in children with Down syndrome, cardiac surgery not only is not contraindicated, as previously suggested, but can be performed with very good results, as clearly shown by Seifert et al.1

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References

- 1. Seifert HA, Howard DL, Silbert JH, Jobes DR. Female gender increases the risk of death during hospitalization for pediatric cardiac surgery. J Thorac Cardiovasc Surg. 2007; 133:668-75.
- 2. Knott-Craig CJ, Elkins RC, Ramakrishnan K, Hartnett DA, Lane MM, Overholt ED, et al. Associated atrial septal defects increase perioperative morbidity after ventricular septal defect repair in infancy. Ann Thorac Surg. 1995; 59:573-8.
- 3. Michielon G, Marino B, Formigari R, Gargiulo G, Picchio F, Digilio MC, et al. Genetic syndromes and outcome after surgical correction of tetralogy of Fallot. Ann Thorac Surg. 2006;81:968-75.
- 4. Giamberti A, Marino B, di Carlo D, Iorio FS, Formigari R, de Zorzi A, et al. Partial atrioventricular canal with congestive heart failure in the first year of life: surgical options. Ann Thorac Surg. 1996;62:151-4.
- 5. Formigari R, Di Donato RM, Gargiulo G, Di Carlo D, Feltri C, Picchio FM, et al. Better surgical prognosis for patients with complete atrioventricular septal defect and Down's syndrome. Ann Thorac Surg. 2004;78:666-72; discussion 672. Review.
- 6. De Biase L, Di Ciommo V, Ballerini L, Bevilacqua M, Marcelletti C, Marino B. Prevalence of left-sided obstructive lesions in patients with atrioventricular canal without Down's syndrome. J Thorac Cardiovasc Surg. 1986;91:467-9.

doi:10.1016/j.jtcvs.2007.07.065