

COMENTÁRIO EDITORIAL

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The arterial switch operation

"There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact."

Mark Twain, Life on the Mississippi, 1883

The arterial switch operation has become the treatment of choice for neonates with transposition of the great arteries (TGA). Hospital mortality is low, although single or intramural coronary arteries remain significant risk factors.¹ Once named anatomical repair by opposition with the physiological repair or atrial switch, the late results are satisfactory^{2,3} but far from being anatomical as pointed by Prof. Yacoub⁴ almost 30 years ago and emphasized by the authors in the discussion. We can understand these late hindrances, namely why some coronary anastomosis grow with obstruction, some patients develop neo-pulmonary trunk stenosis or ventricular dysfunction as reported.^{2,3} However, why some patients will need late surgery for neo-aortic valvular incompetence due to progressive "annular" dilatation even after decades of perfect performance of the valve, is still a matter of some debate. This can be related to the impossibility of reestablish a normal spiral configuration of the outlet septum and great arteries, as pointed by the authors, the reduction in the amount of collagen in the arterial roots in hearts with TGA as compared to that of normal hearts, in addition to less extensive anchorage and embedding of both arterial roots in the myocardium⁵ and/or as observed after the Norwood

or Ross surgeries, the more delicate pulmonary valve is integrated into the systemic circulation and can be damaged by this high-pressure regime.

We have to congratulate the long tradition of this group in their effort to understand and publish their performance.

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