

Introduction

Malperfusion in Acute Descending Dissection: Endovascular or Open Repair?

The two articles in this issue dealing with malperfusion accompanying descending or type B thoracic aortic dissection describe two different techniques that should be part of the aortic surgeon's armamentarium. Drs. Patel and Williams describe the mechanisms by which malperfusion can occur. There can be static, or continuous, obstruction versus dynamic obstruction. The latter may allow for intermittent arterial inflow into the end organ. Malperfusion has traditionally constituted an indication for early operative intervention in descending aortic dissection. These authors describe the endovascular approaches as a less invasive alternative to allow restoration of perfusion to critical end organs. This article describes endovascular stent graft application to the area of the primary tear. Also described are methods of percutaneous fenestration, accompanied, if necessary, by stenting of the true lumen for distal malperfusion. These methods are nicely illustrated and described in this excellent article.

A tried and true method of managing distal malperfusion in descending dissection is that of open fenestration, elegantly described in the article of Drs. Eleftheriades and Escalon. The lead author has over 30 years of experience with this technique. Open fenestration is described and illustrated and should remain an option for the management of difficult malperfusion syndromes in this treacherous entity of descending dissection.

Root Translocation: Pulmonary versus Double Root versus En-Bloc Rotation

The congenital section of this issue further examines operative options for biventricular repair in patients with transposition of the great arteries, vascular septal defect, and pulmonary stenosis. These approaches complement and provide alternatives to the Nikaidoh procedure, which was presented in the Fall 2008 issue of this Journal. José Pedro da Silva and Luciana da Fonseca, from the University of Sao Paulo, Brazil present pulmonary root translocation. Used since 1994, this operation has some similarities to the REV procedure but

utilizes the translocated, native pulmonary valve in the right ventricular outflow tract to provide pulmonary competence with growth potential. Sheng-Shou Hu and colleagues from the Fu Wai Hospital, Beijing describe double root translocation. This approach incorporates independent translocation of both the aortic and the pulmonary roots for biventricular outflow tract reconstruction. Finally, Rudolf Mair from General Hospital Linz, Austria details en-bloc rotation of the truncus arteriosus. This technique involves excision of the aortic and pulmonary roots from the base of the heart in continuity with one another, followed by translocation of the two-valve block. These three articles provide excellent illustrations of innovative approaches to a heart defect that has challenged the creativity of congenital heart surgeons since the introduction of the Rastelli procedure in the 1960s.

Mediastinal Germ Cell Tumors and Tracheoinnominate Artery Fistula

The spring edition of *Operative Techniques in Thoracic and Cardiovascular Surgery* features two articles dealing with two uncommon surgical problems of the mediastinum. In the first article, Dr. Ken Kesler describes in detail his approach to primary malignant mediastinal germ cell tumors. The group at the University of Indiana has a long history of successfully treating these tumors in a multidisciplinary manner and has published extensively on the topic. Dr. Kesler offers a comprehensive assessment of the surgical approach to these tumors and provides the reader with his insight into some of the salient technical points when performing the procedure. In the companion article Dr. Gorav Ailawadi describes the technical management of a tracheo-innominate artery fistula. This complication, most commonly associated with the presence of a long-term tracheostomy, is rare but can be lethal. A thoughtful, careful approach to this problem is presented and as such it will certainly serve as a seminal reference on how to surgically address tracheo-innominate artery fistula. Together these two articles provide a fresh look at the surgical approaches to these problems and add significant value to the existing literature.

Fred A. Crawford Jr, MD
Editor