

Introduction

The Spring 2005 issue begins a new format for *Operative Techniques in Thoracic and Cardiovascular Surgery*, namely a point-counterpoint presentation by technical experts in these areas of a controversial issue of operative management in each of our three subspecialties: adult cardiac surgery, pediatric cardiac surgery, and general thoracic surgery. Going forward, we will follow a similar format in each issue.

In this issue, we present aortic arch aneurysm management, repair of tetralogy of Fallot, and surgical treatment of adenocarcinoma of the esophagus. I think readers will find these articles helpful in understanding the surgical options for these difficult and complicated problems. We would appreciate reader feedback related to this format.

I am indebted to our Associate Editors, Drs Thoralf Sundt, Richard Jonas, and newly appointed Associate Editor for general thoracic surgery, Steven Mentzer, for their imagination and timely help.

Correction of Aortic Arch Aneurysms

Interest in the surgical correction of aortic arch aneurysms has grown in recent years, in large part because of advances in anesthetic and perfusion techniques that permit regular use of circulatory arrest for neurologic protection. Increasing reports of large series with low operative mortality and morbidity as well as the description of reliably reproducible techniques are encouraging surgeons to take on the correction of aortic arch pathologic conditions more aggressively. Some would even debate the advisability of performing total arch replacement at the time of repair of acute dissection, a conversation that likely would not have gone far only a few years ago.

We are fortunate to have contributions to this issue of *Operative Techniques in Thoracic and Cardiovascular Surgery* from two of the leading surgical groups managing aortic arch pathology on a regular basis. Dr Randall Griep is an undisputed pioneer in the management of arch pathology. He and his associates, Drs. David Spielvogel and Steven Lansman, have beautifully described their current technique for perfusion management and anatomic reconstruction during arch replacement as practiced at Mt. Sinai Hospital in New York. Their approach relies on early selective antegrade perfusion. Their article is characteristically clear and concise with tech-

nical details and carefully included “pearls.” We are once again indebted to Dr Griep and group for sharing their thoughtful approach.

A contrasting view is provided by Dr Hazim Safi and his associate, Dr Anthony Estrera. Drs Safi and Estrera have been quite satisfied with retrograde cerebral perfusion as an alternative to antegrade perfusion, although they emphasize the importance of performing it appropriately. Their article provides a lucid description of what they feel are the important aspects of conducting this technique. They also share with us their thoughts on the critical components of arch replacement including the elephant trunk procedure.

We hope that readers will find these descriptions useful. Although most of us do not deal with arch surgery on a regular basis, it is likely that we will be required to manage aortic arch pathology on at least an intermittent basis. We hope that these lucid descriptions will remain in your library to be called on when necessary.

Repair of Tetralogy of Fallot

We are grateful to Dr James Monroe from the United Kingdom and Dr Edward Bove from Ann Arbor, Michigan, for helping to highlight the two different approaches to repair of tetralogy of Fallot. Dr Monroe has clearly illustrated the traditional transventricular approach, which allows ventricular septal defect closure through the same ventriculotomy that is made for relief of outflow tract obstruction. Dr Bove’s article demonstrates the transatrial approach to ventricular septal defect closure and relief of outflow tract obstruction. Excellent results continue to be reported for both these approaches, and this, no doubt, will continue to be an ongoing topic of controversy for the foreseeable future.

Adenocarcinoma of the Esophagus

The optimal treatment strategy for patients with T3N0 adenocarcinoma of the esophagus is controversial. The two most commonly used resectional strategies are transhiatal esophagectomy (THE) and transthoracic esophagectomy (TTE). Minimally invasive esophagectomy, although practiced in selected centers, is not yet in widespread use. Current clinical staging modalities of computerized tomography, positron emission tomography, and esophageal ultrasound with fine

needle aspiration biopsy provide accurate staging information in the majority of patients.

Advocates of a radical en bloc TTE argue that many patients with clinically staged T3N0 tumors have occult metastatic nodal disease. They also argue, correctly, that a more radical resection of the primary tumor, surrounding soft tissue, and regional lymph nodes can be accomplished by TTE. This approach may confer a survival advantage over the less radical THE. Unfortunately, no compelling comparative data exist to support this contention.

Those favoring the THE approach argue correctly that this procedure is associated with lesser morbidity than TTE.

In experienced centers, operative mortality for esophagec-

tomy should be well under 5%, yet complications occur in approximately 50% of patients. These procedures are technically challenging, and successful outcome depends on precise adherence to details of operative technique. Drs Altorki and Orringer are not only proponents of TTE and THE, respectively, but are experts who have developed large experience with these operations, described the technical details of each, and carefully reported their results. These two reports constitute important contributions to the field of esophageal surgery.

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