

Complex reconstruction of the right bronchial system*To the Editor:*

We read with great interest the recent article by Muysoms and van Swieten¹ in the February 1997 issue of the *Journal* on primary repair of the rupture of the main and lobar bronchus. Little has been published on this topic.

Emergency bronchial reconstruction is always challenging, even for an experienced surgeon, and the authors should be congratulated for their result. We² previously reported successful surgery in a similar case of complex disruption of the right bronchial system. Emergency bronchoscopy is useful to establish the site, nature, and sometimes the extent of the bronchial rupture. It should be performed whenever possible for critical intrathoracic injuries after blunt chest trauma.³ However, in our view one should not spend too much time with bronchoscopy or other invasive endoscopic procedures. Emergency thoracotomy is always necessary to evaluate the degree of bronchial rupture, the possibility of reconstruction, the presence or absence of associated lung contusions, and sometimes as a resuscitative measure.

Major pulmonary resection in these patients, who are often in prolonged shock, is associated with a high mortality.^{4,5} Therefore initial bronchial reconstruction should always be attempted to avoid early and late complications and to preserve uninjured lung areas for an adequate gas exchange.

In the past, ruptured bronchi have been repaired and other bronchial anastomoses have been performed with nonabsorbable sutures. However, anastomotic complications have been prevalent.³ We are using monofilament, slowly absorbable 4-0 PDS polydioxanone (Ethicon, Inc., Somerville, N.J.) for bronchial sutures, and we have observed no major anastomotic complications.

Follow-up bronchoscopy performed 12 months later in our case showed an almost normal bronchial lumen with no anastomotic stenosis.²

From our experience, we encourage primary bronchial reconstruction even in the case of complex ruptures rather than major pulmonary resection, a functionally much less satisfactory solution.

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The structure of the aortic root*To the Editor:*

Hokken and associates¹ describe important histologic findings concerning the structure of the ventricular outflow tracts. In this report, they make reference to our comments made in 1991² concerning the aortic "annulus." It is unfortunate in this respect that they chose to ignore more recent work in which we³ described in detail the collagenous condensations at the point of attachment of each leaflet which, as we indicated, "has been termed the annulus fibrosus." Had they studied this work, they would also have noted that we described the "very thin layer of elastic tissue" to be found on the luminal surface of the interleaflet triangles, a finding for which they claim precedence.

Such matters pale into insignificance, however, with their suggestion that the subpulmonary infundibulum is made up, in part, of the right ventricular septum. In this respect, we presume that, when describing a septum, they account for a wall that separates adjacent cardiac cavities. As is widely recognized by all surgeons who perform the Ross procedure, the essential feature that permits the subpulmonary infundibulum to be removed, along with its contained valve, as an autograft is that it does *not* possess a septal component. This can be readily demonstrated by dissections (Fig. 1), but should also have been evident from their histologic sections. The fact that the pulmonary valve leaflets are supported by a freestanding muscular sleeve, whereas the sinotubular junctions are joined in some hearts by the conus ligament, is a fact that should intrigue the Leiden group in terms of embryogenesis. It is certainly not something that should be obscured by description of a "septal" component to the infundibulum.

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