Circumferential Tracheal Replacement: Do the Benefits Warrant the Risks?

To the Editor:

Fabre and colleagues [1] recently reported their experience of both lateral and circumferential tracheal repair with special reference to the already described use of cartilage-reinforced forearm free flaps [2]. Of 12 patients, 2 underwent lateral repair of esophagotracheal fistula, 4 salvage operations, and 6 tracheal/carinal replacement for adenoid cystic carcinoma (ACC) (n = 5) or malacia (n = 1). Although flap-wrapped aortic allografts have proved useful in elective central airway replacement [3], and recently in the emergency setting [4], Fabre and colleagues claim that “we believe this technique, with a mortality of about 50%, should not be used.” Therefore, we take the opportunity to briefly compare the patient data of their six tracheal/carinal replacements with the data from our study [3] (enrollment from 2005 to 2007) of 6 patients undergoing tracheal resection involving the carinal region in four cases, followed by repair with aortic allografts, for ACC (n = 5) or mucoepidermoid tumor (n = 1): (1) In-hospital mortality, 2/6 versus zero; (2) pathology (ACC patients), 4/5 R1 resection versus 5/5 R0 resection; (3) mean survival time, 25 months versus 64 months (of our 6 patients, 3 died at 26, 45, and 77 months, and the 3 survivors at 72, 76, and 87 months are currently in full-time employment). According to the 100% efficacy of chemoradiation in locally advanced ACC of the trachea reported by Allen and colleagues [5] and recently confirmed through electronic communication with the authors, we decided, however, not to include further patients in our study. The results of Fabre and colleagues reporting severe mortality and morbidity (mainly adult respiratory distress syndrome and arterial rupture), and poor quality of life (mucus plugging and 66% of definitive tracheostomy) after implantation of their neoconduit also pleads in favor of chemoradiation as their neoconduit also pleads in favor of chemoradiation as an alternative therapy. By contrast, the successes obtained in esophagotracheal fistula operations demonstrate the relevance of fasciocutaneous flaps in the setting of lateral tracheal repair [1].

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References
Surgery After “Full-Metal Jacket”: A Dangerous Pathway

To the Editor:

I read with interest the papers by both Mataro and colleagues [1] and Demirsoy and associates [2] about coronary bypass grafting to a full-metal jacket left anterior descending coronary artery. I, as many others, face this peculiar aspect of myocardial revascularization [3]. It is difficult to make an absolute statement about any of the described surgical options [1, 2].

In my opinion, the proper surgical technique has to be chosen according to a precise anatomic pattern. It is not unusual to get some piece of information about the condition of the lumen, and wall beyond the coronary occlusion only at surgery, after opening the artery. A proper policy could be to perform either “stentectomy” (open endarterectomy and stent removal) plus grafting or grafting alone according to the lumen size and the wall status. Doing only a graft in the presence of an almost totally covered left anterior descending coronary artery may not be convenient. Leaving a segment of stented wall beyond the anastomotic site may jeopardize the long-term graft function.

In this case, it could be safer to do a stentectomy plus a graft instead of just a graft. Grafting only could be a reasonable alternative providing the stented area is well above the anastomotic site, the coronary bed beyond the occluded area is not grossly affected, and the lumen size is bigger than 1.0 mm.

Maybe the most important issue is trying not to get into this kind of trouble. A good practical warning given by the heart team could be not to keep stenting a left anterior descending coronary artery that does not want to stay open. Any attempt may result in an exercise of wishful thinking.

The full-metal jacket approach could be considered a good example of medical obstinacy, and the cardiologist must know that the fate of a multiple-stented left anterior descending coronary artery may be poor [4]. Both surgical options should be considered as rescue therapy having probably suboptimal long-term results.

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References


Transcatheter Aortic Valve Implantation: Clinical Outcomes and Costs

To the Editor:

Recent data have reported the penetration rate of transcatheter aortic valve implantation (TAVI) to exceed 35% in countries such as Germany and Switzerland [1]. However, the rapid expansion seen in clinical practice has far outpaced any robust clinical or economic evidence for this novel technique. A recent analysis suggested that many of the 40,000 TAVI procedures performed so far cannot be justified on medical or cost-effectiveness grounds, and the European quality control process required for the introduction of TAVI to the market had been compared with that for a domestic toaster [2].

Objectively, the clinical evidence on TAVI should be considered separately for two populations, as described in the PARTNER trials: those who are considered “inoperable” for surgical