The first lobectomy with sleeve resection (SL) of the main bronchus and a segment of pulmonary artery (PAR) for lung cancer (LC) was performed by Allison in 1952 [1], and several articles confirming good results in LC series treated by SL were published before 1960 [1]. In that period, the ideal treatment of LC was considered to be removing the entire organ with its associated lymphatic field, and lobectomy (or SL) appeared to be illogical when pulmonary function was good, and, especially if the nodes were invaded. Nowadays, it is demonstrated that advanced nodal disease does not change the prognosis in different forms of lobectomy (standard or SL) versus pneumonectomy. A meta-analysis confirmed that SL offered better long-term survival than did pneumonectomy, even in higher-stage tumors [2]. The results reported by Schirren and colleagues in this issue, one of the pioneer groups in the subject, are concordant with this consideration [3]. Otherwise, concerning N1 patients, we observed [4] that extralobar N1 was the cause of pneumonectomy in 64% because of impossible fissural dissection, and intralobar N1 was occult and discovered after lobectomy in 22%: N1 interlobar dissection.
was possible in nearly 14%, with the ability of performing pneumonectomy or lobectomy, deliberately. Regarding N2, SL is generally without technical problem in case of skip metastases, but the same considerations must be kept in mind if the N involvement presents in the fissure as in N1 cases. In reviewing the publications about simple SL or with PAR and SL as an alternative procedure for pneumonectomy, two points may be misleading and need to be notified. First, regarding PAR: in their series, Schirren and colleagues [3] report 103 bronchial resections and 67 bronchovascular resections (39.4%), which are among the highest reported PAR frequencies (0–35%, mean 8.9%) [2], but they do not describe the type of PAR. It might be tangential excision with primary closure, larger tangential excision with patch closure, and complete circumferential sleeve resection. The latter is usually rare (3.2% [5] to 9.1% [6]), whereas the first type is more frequent (57.6%) [5]. It is more a technical artifice to control PAR branches in a tumor abutting their origin, and is not considered as real PAR in articles dealing with standard lobectomy. We suggest excluding this type from articles on SL with PAR to not uselessly inflate series and create confusion. Second, as regards SL being an alternative procedure for pneumonectomy: SL can only permit avoiding pneumonectomy in highly anatomically selected patients. In our experience, SL frequency did not change according to time trends. Comparison of 329 lobectomies (43.1%), 33 SLs (4.3%) and 402 pneumonectomies (52.1%) from 1983 to 1988, and 785 lobectomies (72.1%), 42 SLs (3.9%) and 254 pneumonectomies (23.5%) from 2001 to 2006 demonstrates this fact. The changing trend in pneumonectomy toward lobectomy depends more on the advances in diagnostic procedures and the detection of these tumors in more early stages. Induction therapy could increase the chance of performing lobectomy and SL instead of pneumonectomy by T and N size reduction [7], but this needs further evaluation.

References


