I read with great interest the article by Rylski et al. [1] investigating the management and outcomes of iatrogenic acute type A aortic dissection (AAAD) in the current era by extracting data from an international registry. AAAD after non-aortic cardiac surgery is considered an extremely dreadful complication, converting a low-risk procedure into a high-risk rescue situation. In the present report, the authors found that 30-day mortality after surgical correction of postsurgical-induced AAAD (n = 43 patients) is 12%. This relatively low mortality rate contradicts the findings of previous reports.

A report from the International Registry of Aortic Dissection published in 2002 [2] establishes that the mortality of iatrogenic AAAD is higher than that of spontaneous aortic dissection. They identified in this observational registry 18 patients with postsurgical-induced AAAD with a mortality rate of 32%. Recently, Leontyev et al. [3] reported the outcomes of 36 patients with postsurgical-induced AAAD in a single high-volume cardiac surgery centre over a 14-year period. Once again, the mortality rate was high in this subset of patients at 35.5% for those diagnosed perioperatively and exceedingly high at 60% for those detected in the early postoperative period. More recently, the largest post-cardiotomy AAAD report [4] has been published with similarly high in-hospital mortality rate. Of note, the overall operative mortality observed was 27% in a cohort of 103 patients. This paper was the collaborative result between nine heart centres in four European countries. Although this study excluded patients with previous aortic surgery for aneurysm or dissection, the mortality rate was somewhat higher than that in the current published series.

The discrepancy between data can be attributed to ambiguous definitions and varying inclusion and exclusion criteria. Therefore, for accurate comparison of data for future reporting, Stanger et al. [4] advocated using the following definitions. AAAD should be categorized into four different entities depending on the time interval between the primary cardiac surgery and the diagnosis of the dissection. AAAD is considered intraoperative when the dissection is recognized and treated during the initial cardiac surgery. Dissection within 2–4 weeks of index cardiac surgery is classified as early postoperative AAAD and this occurrence is associated with a woefully high risk of mortality. Late dissection is defined as occurring >30 days after primary heart surgery. Symptomatic patients are considered having late acute dissection, however late chronic dissection is a radiological incidental finding without acute symptoms. In the latest report [4], the mortality rates for intraoperative, early postoperative, late acute and chronic AAAD were 17, 42, 32 and 22%, respectively. Another important finding is the valuable effect of preoperative coronary angiography implementation to assess coronary artery and grafts status especially in patients with previous coronary artery bypass grafting surgery.

With the increasing number of patients undergoing heart surgery and because previous cardiac surgery is increasingly recognized as an additional risk factor for aortic dissection [5], the incidence of post-cardiotomy aortic dissection will continue to increase. With careful planning by using preoperative coronary angiography and prompt execution, the outcomes in redo sternotomy operations for aortic dissection will parallel the results of spontaneous aortic dissection.

REFERENCES