

OPERATION	NUMBER	UNADJUSTED OPERATIVE MORTALITY (%)
MVR (isolated)	10,699	4.5
MVR + CAB	3509	9.6
MVRp	12,424	1.2
MVRp + CAB	4093	5.4

^aData are for calendar year 2018 during which 1088 participant groups reported a total of 287,872 procedures. Surgical mitral valve commissurotomy cases are included in the mitral valve repair procedures.

Abbreviations: CAB, coronary artery bypass; MVR, mitral valve replacement; MVRp, mitral valve repair.

Source: Adapted from ME Bowdish et al: Ann Thorac Surg 109:1646, 2020.

Surgery for chronic severe primary MR is indicated once symptoms occur, especially if valve repair is feasible ([Fig. 264-1](#)). Surgery should also be recommended for asymptomatic patients with LV dysfunction characterized by an EF $\leq 60\%$ or an LV end-systolic dimension (LV ESD) ≥ 40 mm. Other indications for early consideration of mitral valve repair in asymptomatic patients include a progressive decrease in LVEF or increase in LV ESD on serial imaging as well as MV anatomy that would predict a $>95\%$ of a successful and durable repair in a low surgical risk patient. These aggressive recommendations for surgery are predicated on the adverse long-term consequences of waiting for LV function to decline further as well as the outstanding results achievable with mitral valve repair by reference surgeons at high-volume centers. Indeed, repair of myxomatous MR (e.g., prolapse, flail) in patients <75 years with normal LV systolic function and no coronary artery disease (CAD) can now be performed by experienced surgeons with $<1\%$ perioperative mortality risk. The risk of stroke, however, is also $\sim 1\%$. Repair is feasible in up to 95% of patients with myxomatous disease operated on by a high-volume surgeon in a referral center of excellence. Repair techniques include chordal transfer, creation of neochords, limited leaflet resection, and insertion of an annuloplasty band. Long-term durability is excellent; the incidence of reoperative surgery for failed primary repair is $\sim 1\%$ per year for the first 10 years after surgery. For patients with AF, left