



# Functional mitral regurgitation

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## Abstract

Dr. O.P. Yadava, Editor-in-Chief, IJTC, and Dr. J.L. Pomar, Former President, EACTS, discuss issues related to secondary mitral regurgitation (MR). Though it is considered a ventricular disease, mitral valve leaflets are not entirely normal. Alignment of subvalvular apparatus plays a more dominant role than annular dilatation. Early repair is preferred.

**Keywords** Secondary mitral regurgitation · Repair versus replacement · Timing of surgery

The common perception that mitral valve is normal in functional MR is a flawed one [1, 2]. Dr. Pomar agrees and opines that the substrate of the valve leaflets, including the matrix metallo-proteinases, undergo changes. Multiple factors play a role in the causation of MR. Probably, annular dilatation is not the most important factor, and the alignment of the subvalvular apparatus may have a more dominant role [3]. Prof. Robert Levine from USA has done a lot of work on this front [4]. With primary percutaneous coronary interventions (PCI) becoming universally available, at least in Europe, the secondary MR rates have come down.

Prof. Pomar feels that these patients should be handled early in the course of the disease for better long-term outcomes and these interventions should ideally be performed in specific centres with good results. Dr. Pomar stresses on the fact that it is not the technique of the repair/replacement, but the timing of the surgery, which is most important in these

patients. This is one field that the interventional cardiologists are going to take over from the surgeons and have in fact already done to a large extent.

Dr. Pomar believes that all annuloplasty rings performed equally well and probably planar rings do just as well as the specialized saddle-shaped rings for annuloplasty of the mitral valve. However, he issues a caveat- with the amount of heterogeneity with heart failure, a one-stop solution does not exist and one must customize options to the patient's needs.

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