INTRODUCTION &

AIM OF THE WORK

The most important predictor of survival in patients with coronary artery disease is the ejection fraction **[Mock et al., 1982; Sanz et al., 1982; Califf et al., 1985; and Mancini et al., 1992]**. Although the EF is the most commonly used measure of left ventricular ejection performance because of its prognostic value, patients with coronary artery disease often have chronic regional motion abnormalities which are more characteristic **[Gersh et al., 1997]**.

Investigators who evaluate the role of collaterals in the early period of acute myocardial infarction showed that there was a beneficial effect of collaterals in restoring myocardial function and limiting infarct size **[Saito et al., 1985; Rentrop et al., 1989; Habib et al., 1991; and Sabia et al., 1992]**.

In cases of non-occluded but critically stenotic arteries shortly after myocardial infarction, the main factor determining myocardial function was the perfusion status of the infarct related artery **[Belenkie et al., 1991; Gibson et al., 1996; and French et al., 1998]**.

However, the effect of these parameters and other factors on myocardial function in cases of chronic coronary artery lesions are still incompletely defined. While some studies investigate their effect on global left ventricular function **[Julliere et al., 1991; and Galvani et al., 1993]**, survival **[Hansen, 1989 and White et al., 1994]** and

incidence of acute myocardial infarction **[Pellinen et al., 1991]**, only few studies have been directed toward the effect of these parameters on regional myocardial function **(Mutlak et al., 1998).**

AIM OF THE WORK

This work was performed to study the effect of collateral flow, antegrade flow, severity of lesion, location of lesion and length of lesion on global and regional function in patients with chronic left anterior descending coronary artery disease.