OBJECTIVE. The objective of present research was to assess the results of the myocardial revascularization using different techniques: with beating heart, with extracorporeal circulation and anoxic arrest, and with assisted beating heart. METHODS. A prospective and descriptive study was conducted in the Cardiology Center of the "Hermanos Ameijeiras" Clinical Surgical Hospital between March, 2008 and March, 2009. Sample included 102 patients with clinical diagnosis of ischemic heart disease, admitted in such service and operated on using the standard techniques. RESULTS. There was predominance of ages over 60 (56,9%). The more associated coronary risk factors were smoking and dyslipidemia. The indication of beating heart revascularization was choose for patients presenting with disease in three coronary vessels and comorbid diseases, mainly the myocardial acute infarction and diabetes mellitus. The systolic function in postoperative stage was normal in most of cases with prevalence of hypokinesia as a segmentary alteration. The surgical time was less for the beating heart procedure (approximately 5,5 h) with a great number of bridges and a minimum of cardiac complications in the postoperative stage. The arrhythmias and surgical wound sepsis were the more frequent complications; this latter extended the hospital stay. The patients underwent to assisted beating heart procedure have the longest time of mechanical ventilation and of hospital stay. There was predominance of mortality in theses cases (36,3%) but in remained techniques it was less. The beating heart technique reported great economic advantages to our country over the other procedures (p = 0,0048) saving around $400.00 and 10 040 currency by patient. CONCLUSIONS. The technique of myocardial revascularization with beating heart was choose in patients with a greater surgical risk standing out the advanced age, the morbid disease and the coronary risk factors, as well as a low incidence of postoperative morbidity and mortality associated with minor complications, a shorter surgical time and short hospital general stay. This technique provides to our country economic advantages and the saving of great sum of money in national currency and in USA dollars.

Keywords
Myocardial revascularization surgery, beating heart, extracorporeal circulation