

GUEST EDITOR



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Surgery for Preinfarction Angina

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Immediate relief of anginal pain is the dramatic result of aortocoronary bypass. Initially the operation was performed electively for patients with chronic angina. Subsequently indications for operation were expanded to include patients with constant pain and electrocardiographic changes of impending infarction. These patients with "preinfarction angina" undergo coronary arteriograms, frequently as an emergency. Lesions commonly involve several vessels and are usually distributed in a manner that makes aortocoronary bypass possible. Stenosis of the left main coronary artery is occasionally noted and is of ominous prognostic significance. Operation is frequently done on an urgent basis. In some instances the patient is taken from the catheterization laboratory directly to the operating room.

We use disposable bubble oxygenators primed with five percent dextrose in lactated Ringer's solution. Temperature of the patient is adjusted to 30°C with a heat exchanger and iced Ringer's Lactate solution is poured over the heart producing ventricular fibrillation. The aorta is cross-clamped and a sump suction cannula placed in the left atrium via the right superior pulmonary vein. A quiet bloodless field is obtained and permits precise anastomoses. Our preference has been for saphenous vein aortocoronary bypass, but the internal mammary artery has been used in selected patients. If a coronary artery, usually the right, is completely or severely obstructed, the plaque must be removed by endarterectomy before the lower end of the graft is attached.

After all grafts are inserted, cardiopulmonary bypass is discontinued after perfusion times ranging up to 60 minutes for triple bypass. Rewarming is begun midway through the operation and fibrillation can usually be converted to sinus rhythm with a single direct current shock.

Our series of over 3000 patients who have undergone aortocoronary bypass includes many with preinfarction angina. Relief of pain is the usual result. Operative mortality is low and postoperative infarction is rare. Results of this dynamic approach recommend surgical treatment for patients with preinfarction angina.