OPERATIVE PROCEDURE,1. Thromboendarterectomy of right common, external, and internal carotid artery utilizing internal shunt and Dacron patch angioplasty closure.,2. Coronary artery bypass grafting x3 utilizing left internal mammary artery to left anterior descending, and reverse autogenous saphenous vein graft to the obtuse marginal, posterior descending branch of the right coronary artery. Total cardiopulmonary bypass,cold blood potassium cardioplegia, antegrade and retrograde, for myocardial protection, placement of temporary pacing wires.,DESCRIPTION:, The patient was brought to the operating room, placed in supine position. Adequate general endotracheal anesthesia was induced. Appropriate monitoring lines were placed. The chest, abdomen and legs were prepped and draped in a sterile fashion. The greater saphenous vein was harvested from the right upper leg through interrupted skin incisions and was prepared by ligating all branches with 4-0 silk and flushing with vein solution. The leg was closed with running 3-0 Dexon subcu, and running 4-0 Dexon subcuticular on the skin, and later wrapped. A median sternotomy incision was made and the left internal mammary artery was dissected free from its takeoff at the subclavian to its bifurcation at the diaphragm and surrounded with papaverine-soaked gauze. The sternum was closed. A right carotid incision was made along the anterior border of the sternocleidomastoid muscle and carried down to and through the platysma. The deep fascia was divided. The facial vein was divided between clamps and tied with 2-0 silk. The common carotid artery, takeoff of the

external and internal carotid arteries were dissected free, with care taken to identify and preserve the hypoglossal and vagus nerves. The common carotid artery was double-looped with umbilical tape, takeoff of the external was looped with a heavy silk, distal internal was double-looped with a heavy silk. Shunts were prepared. A patch was prepared. Heparin 50 mg was given IV. Clamp was placed on the beginning of the takeoff of the external and the proximal common carotid artery. Distal internal was held with a forceps. Internal carotid artery was opened with 11-blade. Potts scissors were then used to extend the aortotomy through the lesion into good internal carotid artery beyond. The shunt was placed and proximal and distal snares were tightened. Endarterectomy was carried out under direct vision in the common carotid artery and the internal reaching a fine, feathery distal edge using eversion on the external. All loose debris was removed and Dacron patch was then sutured in place with running 6-0 Prolene suture, removing the shunt just prior to completing the suture line. Suture line was completed and the neck was packed.,The pericardium was opened. A pericardial cradle was created. The patient was heparinized for cardiopulmonary bypass, cannulated with a single aortic and single venous cannula. A retrograde cardioplegia cannula was placed with a pursestring of 4-0 Prolene into the coronary sinus, and secured to a Rumel tourniquet. An antegrade cardioplegia needle sump was placed in the ascending aorta and cardiopulmonary bypass was instituted. The ascending aorta was cross-clamped and cold blood potassium

cardioplegia was given antegrade, a total of 5 cc per kg. This was followed sumping of the ascending aorta and retrograde cardioplegia, a total of 5 cc per kg to the coronary sinus. The obtuse marginal 1 coronary was identified and opened, and an end-to-side anastomosis was then performed with running 7-0 Prolene suture. The vein was cut to length. Antegrade and retrograde cold blood potassium cardioplegia was given. The obtuse marginal 2 was not felt to be suitable for bypass, therefore, the posterior descending of the right coronary was identified and opened, and an end-to-side anastomosis was then performed with running 7-0 Prolene suture to reverse autogenous saphenous vein. The vein was cut to length. The mammary was clipped distally, divided and spatulated for anastomosis. Antegrade and retrograde cold blood potassium cardioplegia was given. The anterior descending was identified and opened. the mammary was then sutured to this with running 8-0 Prolene suture. Warm blood potassium cardioplegia was given, and the cross-clamp was removed. A partial-occlusion clamp was placed. Two aortotomies were made. The veins were cut to fit these and sutured in place with running 5-0 Prolene suture. The partial- occlusion clamp was removed. All anastomoses were inspected and noted to be patent and dry. Atrial and ventricular pacing wires were placed. Ventilation was commenced. The patient was fully warmed. The patient was weaned from cardiopulmonary bypass and de-cannulated in a routine fashion. Protamine was given. Good hemostasis was noted. A single mediastinal chest tube and bilateral pleural Blake drains were placed. The

sternum was closed with figure-of-eight stainless steel wire, the linea alba with figure-of-eight #1 Vicryl, the sternal fascia with running #1 Vicryl, the subcu with running 2-0 Dexon and the skin with a running 4-0 Dexon subcuticular stitch.