

apportionment of the bridging leaflets to the right and left AV valves had been determined by filling the ventricle with fluid and the bridging leaflets were sutured to the free edge of the patch using continuous runs of 5(0) Prolene. This in turn permitted the left components of the superior and inferior bridging leaflets to be sutured together. Finally a patch of pericardium was taken to close the atrio component of the defect. First it was sutured to the re-constructed AV valve leaflets, the stitches including the intra ventricular patch as well. The suture line was taken widely around the coronary sinus so that it drained to the left-side of the patch. The rest of the suture line was completed to the margin of the defect using continuous runs of 5(0) Prolene. The patch was large enough to cover the fossa ovalis and the patent foramen ovale. Lines were placed in the pulmonary artery and the left atrium. The right atrium was closed with continuous runs of 5(0).

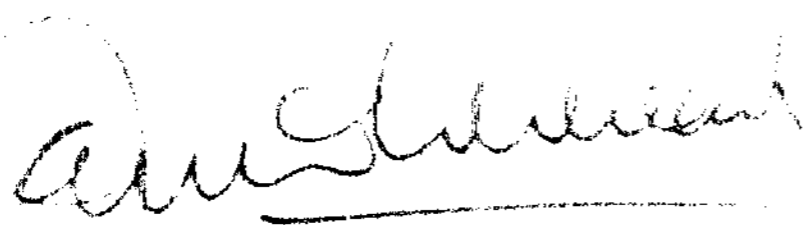
The aortic cross clamp was removed and air excluded from the aortic root and both sides of the heart. Cardiac action was restored and for quite some time was in heart block but later after withdrawal of bypass, stabilised in sinus rhythm. Rewarming took place. When full rewarming had been achieved, bypass was withdrawn with the assistance of ventricular pacing at that stage. Cardiac performance was moderate and inotropic support was needed. Decannulation was carried out and the cardiomyotomies closed in the usual way.

CLOSURE:

Haemostasis was satisfactory. LA and PA lines. Pericardial and mediastinal, right and left pleural drains. Two atrial, two ventricular pacing wires. Swabs, needles and instruments correct. Sternum with number 2 Eithbond. Superficial closure in layers.

Two difficulties were experienced after coming off bypass. The first was a major discrepancy in pressure between the ascending aorta and the femoral artery monitoring line. This persisted after removal of the cannula. Needle pressures in the aortic arch seemed to indicate one part where the pressure was close to the ascending aortic pressure and another part where it was closer to the femoral artery pressure. Inspection of the aorta did not suggest that there was a significant constriction due to the cannulation in purse-strings. The question of possible dissection was considered but not pursued. The second problem was that the baby's oxygen saturation appeared to persist in the low 80s after withdrawal of bypass. This reduction was much greater than that which would be expected from diversion of the coronary sinus flow. In order to eliminate these two problems, epicardial echocardiography was carried out by Dr Wilde before closure. This indicated that there was good forward flow around the aortic arch, that there was the possibility of some obstruction as the velocity was slightly higher than usual but nothing significant. As far as the intra-cardiac anatomy was concerned, the mitral valve appeared to be competent, left ventricular function was good and there were no significant communications between the right and left sides of the heart. Reassured by this information closure was undertaken.

DIAGNOSTIC PRESSURES: LA 13-15, RA 10-12, LV 70-80, RV 30-40. Oxygen saturations in RA and PA were 44%.



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