ROYAL INFIRMARY **GLASGOW**

Eileen O'Hara

DATE

7 June 1985

PLEASE WRITE OVER WHITE LETTERS

SURGEON Mr M J Samuel **OPERATION** Size 33 mm Wessex medical mitral valve

replacement.

Assistant: Mr I J Reece Anaesthetist: Dr Prentice

FINDINGS: There were moderate tight adhesions on the heart from previous mitral valvotomy. The heart was in atrial fibrillation. All chambers of the heart were enlarged with a tense pulmonary artery. The mitral valve was stenosed and there was evidence of rupture of several papillary cords. The valve was obviously incompetent.

PROCEDURE: The chest was opened by median sternotomy with vertical incision of the pericardium, the right pleural space being opened. The adhesions of the anterior surface of the ventricle, atrium and aorta were divided and cleared. After heparinization the ascending aorta and right atrium were cannulated and bypass commenced with systemic cooling to 20°C. During cooling more of the atrium and ventricle was freed of adhesions. The aorta was cross clamped and cardioplegia instilled into the aortic root producing a slow but definite diastolic arrest. Cold saline was applied to the heart to assist cooling. left atrium was opened and the slightly thickened mitral valve was inspected and then excised leaving a small rim of valve tissue. The atrium was washed out with cold saline. The annulus was sized and a size 33 mm valve was found to be appropriate. The valve was inserted using interrupted inverted mattress sutures, 13 in all. The valve was then pushed down onto the annulus where it seated well: and was tied down firmly. Rewarming was commenced and the atriotomy was closed with running 4/0 Prolene and after thoroughly de-airing the heart, the cross clamp was removed. The heart quickly began to fibrillate and was successfully defibrillated into slow nodal rhythm. Bypass was discontinued after pacing wires had been inserted and the heart paced at 90 beats per minute. The cannulae were removed, Protamine administered and haemostasis was adequate. The sternal halves were approximated with six stainless steel wires, soft tissues closed with Dexon with subcuticular Dexon to skin. The pericardial and mediastinal spaces were drained.

PERFUSION DATA: Sarn's 8 mm aortic cannula, two venous cannulae. Minimum temperature on bypass 20°C, minimum blood temperature 19°C. Cross clamp time 59 minutes and total bypass time 87 minutes.

MJS/CB 10.6.85

MATERIAL SENT FOR EXAMINATION