

immediately and four and five minutes after injection. The accompanying sinograms show what appears to be a complete block $2\frac{1}{2}$ inches posterior to the anterior fontanelle. It will be seen that the opaque fluid has passed laterally, but after five minutes is still held up at this point posteriorly.

Myocardial Ischæmia treated by Graft of Skeletal Muscle to the Heart.

—LOUIS LAVINE, M.B., and HAROLD UPCOTT, F.R.C.S.

The patient, Mr. P., aged 44, is a typical acromegalic.

Symptoms.—Progressive dyspnœa for four years. Admitted to Hull Royal Infirmary September 16, 1936. In spite of rest in bed was unable to walk more than 5 yards without a rest.

Condition on examination.—Heart enlarged. Auricular fibrillation and myocardial changes.

Diagnosis.—Myocardial ischæmia and auricular fibrillation, produced by coronary insufficiency.

Operation.—November 5, 1936: Graft of skeletal muscle to the heart (Beck's operation) under local anæsthesia.

Progress.—February 1937: Arrhythmia and fibrillation persist, but the heart sounds are stronger. The patient is now able to walk 140 yards, fully dressed, without undue shortness of breath.

Discussion.—Mr. UPCOTT said that while the omentum was peculiarly well fitted to carry a vicarious blood supply (a fact familiar to all surgeons), benefit in this case, and in some of the cases reported by Beck, had followed on the muscle-graft operation. If this were to be attributed to revascularization of the heart it was possible that this was as much the result of the injury inflicted by the operative approach as of the particular method of graft employed.

Dr. GEOFFREY KONSTAM said he must pay tribute to the skill with which the operation had been performed, but he had some doubt as to the suitability of the patient for the operation. He did not consider that the evidence of myocardial ischæmia was conclusive, nor did he think that the post-operative condition warranted a favourable prognosis. The patient was an acromegalic with auricular fibrillation and an enlarged heart: his arteries were normal for his age, and fibrillation probably accounted for the cardiac enlargement. Even if the cardiomegaly was part of the acromegalic syndrome, myocardial ischæmia could not be inferred. Comparison between the skiagrams taken before and after operation showed that the diameter of the post-operative cardiac shadow had widened by 2 or 3 c.mm.—a finding of poor prognostic significance. The heart-rate was approximately 140, and he thought that digitalis should be exhibited.

Dr. F. PARKES WEBER, referring to Dr. Konstam's remarks, said he thought that the cardiac degenerative signs were almost certainly due to defective blood supply following the great hyperplasia of the heart ("cardiomegaly") connected with the patient's acromegaly.