suffered from heart-burn and pain in the epigastrium. In 1921 appendicectomy was performed with relief from symptoms for six months. A recurrence of epigastric pain, with poor appetite, led to her admission here on the medical side. A barium meal showed the stomach to be low in position but apparently normal. Cholecystography revealed the gall-bladder filling well with bile but with stones embedded.

In instance these cases to show that cholelithiasis may mimic true gastric lesions very closely; but generally test meals and barium meals in the hands of experts lead to differentiation.

We now pass to the consideration of some cases of a totally different character.

This patient had very severe osteo-arthritis of mono-articular type with almost absolute ankylosis of the right hip. Whitman suggested that in a case of this type one should excise the head round the neck, detach the great trochanter with all its muscles, abduct the thigh, tilt the upper end of the femur into the acetabulum, reattach the great trochanter down the shaft and implant something to make a joint. Such a task undertaken in these cases is by no means easy; but this patient had perpetual pain and could walk only with great difficulty. The result, as seen on the fluoroscopic screen, may not be pretty, nor is the gait elegant, but the difference to the man hitherto quite disabled is very considerable.

The other patient who has undergone the same operation comes up with crutches, which is not, perhaps, a recommendation. I think, however, he uses his crutches for moral support and could really dispense with them. He was operated upon seven months ago so that he ought to be walking better if the operation is to be considered successful.

The next case is that of a patient who at the age of eight fell 50 feet or so on to a marble floor and smashed his head, with resulting complete paralysis of the right side. The leg recovered after trephining and clearing the clot which had spread over both hemispheres from the superior longitudinal sinus. For many years the right arm gave trouble, but recovered when he learnt the 'cello at the age of 16. He had a large silver plate moulded to his skull for five years, at the end of which time the silver screws began to erode, the plate loosened, and was removed. A year or two later epileptic fits occurred which were controlled by luminal. More recently the fits became Jacksonian, and Dr. Hildred Carlill advised some further operation to fill the gap and detachment of the superficial parts from the dura. I inserted six grafts from his tibia which have consolidated well. He has since been free from attacks.

Finally, we will consider the case of a girl who had already lost the thumb of her left hand and two fingers of her right hand from Raynaud's disease, and who had come in on account of threatening gangrene of three more fingers. We decided to try Leriche's operation, and we denuded the third part of the axillary and the first part of the brachial artery for one and a half inches. The result was dramatic. On the day following operation the typical dead white areas were replaced by pink vascularity, the gangrenous area sloughed off quite superficially, and a very useful finger has resulted. What is more, the improvement of her condition has persisted, and you will agree that the recent wintry weather has supplied an exacting test. We intend operating on the other limb in the near future.

I do not know enough of this operation to dogmatise generally. More extensive experience is required. But this case, at any rate, has been most successful, and is a distinct encouragement to approach others of a similar character.

IN THE MEDICAL WARDS OF THE PRINCE OF WALES'S GENERAL HOSPITAL

WITH

DR A. J. WHITING.

THERE are several patients at present in the wards whose cases illustrate fairly well some different causes of heart failure and I should like to draw attention particularly to them.

I have the opportunity of exhibiting three or four cases of heart failure associated with auricular fibrillation. As is well known among the ordinary overt indications of this pathological state, in the patients who are not under appropriate treatment with digitalis or one of its allies, are: (1) a completely irregular heart-beat, the *pulsus perpetuus irregularis*, no two consecutive beats being alike; (2) a rapid heart-rate 120 or perhaps 140 or more per minute; (3) signs of heart failure, at any rate in the severer cases, such as dyspnoea on exertion or at rest, so that the patient may not be able to lie down or may require a number of pillows under his head, the number required affording a rough index of the degree of cardiac embarrassment; or gauged in another way in the persons who are orthopnoic the varying inability to hold the breath, for a few seconds only, or not at all; (4) there is often cedema, of the type of anasarca and ascites, with signs of congestion of the viscera, an enlarged liver, slight albuminuria, cedema of the lungs with an irritable cough which comes and goes as his condition varies in degree; and (5) a feeling of distress which likewise waxes and wanes and disappears in a remarkable way when the normal rhythm is restored either spontaneously, in the early cases marking the end of a paroxysm, or as the result of treatment with digitalis or quinidine.

On the analytical side, the main thing in addition to the arrhythmia is the absence of an auricular wave from the jugular pulse curve indicating virtual paralysis of the auricle. If, however, the patient is or has been recently under treatment with one of the digitalis group of remedies the ventricular rate may be quite regular, and it is then that the electrocardiogram or polygram showing the absence of the auricular waves is of especial value in diagnosis.

CASE 1 is that of a man, aged 39, who, as you see, is greatly emaciated suggesting the possibility of some malignant disease, possibly of the digestive organs. This was the first thing, indeed, that attracted attention when he came to the out-patient room, being sent up by his medical adviser. As he was obviously very ill he was forthwith taken into the ward.

Careful examination failed to elicit evidence of any gross structural disease in his abdominal organs. [X ray plates of the abdomen were shown.]

On examination of his lungs there were found signs of old tuberculous disease which were confirmed by X ray

examination. There was nothing to suggest active lung disease beyond some congestion, and he had no symptom of such; no sputum, no pyrexia, no considerable coughing.

Examination of the eyes reveals exophthalmos. The thyroid is slightly enlarged. He has signs therefore taken with his tachycardia of $120 \pm$ of, at any rate, a larval form of exophthalmic goitre called, not very happily, *formes frustes* by the French. Unhappily, because, as I understand, the term *frustes* is applied to coins whose inscriptions have been defaced by wear, whereas in these larval cases the inscription has never been fully inscribed. On inquiring into the history of the case it was found that a diagnosis of Graves's disease had been made in the past.

Then as to his heart; there is a systolic mitral murmur propagated into his axilla, somewhat rough in character, and the heart is enlarged. A question therefore arises whether the tachycardia is a part of his exophthalmic goitre or part of his auricular fibrillation, or, indeed, whether the auricular fibrillation is a late result of the heart strain arising from his exophthalmic goitre, if such can occur. At present I am disposed to think that his heart disability is due to some intrinsic and antecedent heart damage mainly for this reason, that, in addition to having had rheumatic fever 14 years before with dropsy nine years ago, his heart-rate has fallen from 120 to 80 under the administration of digitalis. That certainly is a result not to be looked for in uncomplicated exophthalmic goitre; besides this the heart sounds suggest a former damage to the mitral valve.

[Portions of the jugular and radial tracings were shown in which it was evident that in place of the normal triple jugular complex—A.C.V.—there is a bifid complex which the analysis proves to be C.V. There is no mound of A wave from the side of which the C wave rises, but instead a wide ditch.]

On the other supposition, however, that the auricular fibrillation is a result of the tachycardia of exophthalmic goitre, the idea is suggested that in such case it may not be altogether disadvantageous so far as the tachycardia with a fibrillating auricle is susceptible of removal by digitalis and the other is not. I have said that the heart-rate fell from 120 to 80 under digitalis, and he has had nothing else. It may be said, Why not try to abolish the abnormal rhythm with quinidine? The case, in my judgment, is not suitable for such treatment; first because there is a very long history of disability, and secondly because while under treatment in the ward he has had arterial embolism. His right hand and forearm became suddenly quite cold and pulseless, and although the surface temperature returned in the course of two or three days his pulse at the wrist can only now be indistinctly felt, that is three weeks or more after the event. Besides this there was a history of blood in his sputum shortly before admission.

One of the great drawbacks of the quinidine treatment is the tendency to be followed by embolism (of which there has been some unhappy experience in this ward), and this consideration up to the present has dissuaded me from giving the drug to him. In another recent case of auricular fibrillation in the wards in which quinidine had not been exhibited there was multiple embolism including one in the internal capsule, so in fairness we should remember that embolism is not infrequent in the absence of quinidine treatment.

CASE 2 is that of a man, aged 43, who had had three attacks of rheumatic fever in childhood and had heart symptoms for 30 years recognised eventually to be associated with mitral stenosis. During 1925 it was found that he was the subject of auricular fibrillation. Two months ago he complained of palpitation and cough, and became unable to work. Latterly his urine has become scanty and he had râles at the bases of his lungs, but there was no oedema or considerable dyspnoea, and his urine was free from albumin.¹ His heart, as you will find, is enlarged, the first sound is clapping and short, and there is a diastolic murmur of the *diminuendo* type with a thrill, the murmur being especially audible when lying on his right side. Tracings showed the bifid C.V. complex in his jugular

pulse characteristic of auricular fibrillation. His cardiac rate did not rise above 116.

This case seemed a suitable one for the exhibition of quinidine. The method followed was to give him digitalis until his heart-rate came down below 80, taking about a week to do this and keeping him rigorously in bed the whole time; then 6 gr. of quinidine were given every four hours until seven doses were given—i.e., 42 gr. in all—when his normal rhythm was restored. He looked a transformed man and felt it. [Tracings substantiate this point.] The drug was given in four-hourly doses night and day because, as you know, the effect of the drug is very evanescent. If after 42 gr. had been given there had been no such restoration, I should have chosen to discontinue it and to return to the attack at a later date.

There were no untoward effects in his case such as are not uncommonly seen—violent heart action for, as is well known, quinidine has the unfortunate effect of accelerating the ventricular rate while it tends to lower the auricular rate. Moreover, he is a man of placid temperament, which is a distinct gain during the use of quinidine particularly. He was then put on digitalis regularly with the idea, as it were, of consolidating the position, and all went well for two weeks, the man walking about the ward. Then he had news of great domestic distress which required his immediate return home, and upset him much emotionally. Two days saw his return to the hospital and, as was then found, the return of his fibrillation.

CASE 3, that of a man, aged 45, is a fairly straightforward example of auricular fibrillation due in all probability to a long past carditis. He has shortness of breath on exertion, a completely irregular pulse, and a systolic mitral murmur at the apex of the heart; only very little general oedema, but relatively very great oedema of the scrotum. [Characteristic tracings of his condition were shown.] Under digitalis his heart-beat became much less rapid and almost regular. Then he was put on quinidine, given in the manner I have described, and after three doses of 6 gr. each, given at four-hourly intervals, the normal rhythm of his heart was established, the auricle beating satisfactorily. Since then, according to rule, he has been taking digitalis regularly.

To turn now to a different type of condition.

Here is a man, aged 46, who for two years has been troubled with a tickling cough; six months ago he lost his voice, but this returned, being, however, a little thick and weak, so that he could not speak loudly; one month ago he began to suffer from shortness of breath, his cough was increased, and he had slight pain in his chest. His upper chest to the left of the sternum bulges considerably; the apex beat is not palpable, dullness, continuous with the cardiac dullness, extends up to the first interspace, more on the left side than the right, and the breath sounds and vocal fremitus are so much diminished over this area as to be barely appreciable. The breath sounds are also diminished in the neighbourhood of the root of the left lung. His left vocal cord is in the cadaveric position, his pupils became unequal only after he had been in the hospital some time, and slight tracheal tugging developed. He has had no dysphagia or inequality of the radial pulses. There is a to-and-fro murmur conducted along the left side of the sternum and the breath has an odour resembling that of bronchiectasis. The W.R. is positive. The X ray plates show a large aneurysm of the arch of the aorta much more on the left side than the right.

The last case is that of a woman, aged 30, who during the last week or so has developed signs of heart failure, discomfort, or something more referred to the cardiac region, much dyspnoea on slight exertion, and in paroxysms at night, oedema of the legs, and palpitation. Her pulse is rapid, but regular; she has a systolic mitral murmur and her heart is somewhat enlarged. Râles are audible all over the chest, and the urine contains not only albumin but blood also. The cause of her heart failure is not far to seek; the albuminuria is copious, she has a blood-urea of 105 mg. per 100 c.cm. instead of 40 or thereabouts, her

systolic blood pressure is 220 mg. Under rest and nursing the signs of heart failure diminished, but there remained headache, nausea, vomiting, and other signs of renal disease.

Other cases I will only indicate.

One is a woman with a lump in the right upper quadrant of the abdomen about as large as a foetal head. She has been jaundiced for many weeks. The lump is dull on percussion, continuous with the liver and regular in shape. There can be but little doubt that it is an enlarged gall-bladder or that its cause is malignant disease, although she is only 32. She refuses operation.

The other case is a man of 45 who has as big a tumour or larger filling up the ilio-costal angle, palpable between the hands placed back and front in the flank, even in outline and having colon resonance in front of it. There could be no doubt that it was renal, particularly after cystoscopic examination had shown no urinary outflow from the right ureteric orifice. He had had during the previous nine months two attacks of very severe colic-like pain, each lasting at its worst about 24 hours. The case was one of hydronephrosis for which nephrectomy was performed.

THE FELLOWSHIP OF MEDICINE.

REPORT OF HONORARY SECRETARIES FOR THE YEAR 1925.

THE work of the Fellowship of Medicine and Post-Graduate Medical Association has been carried on without intermission throughout 1925, and it is evident from the satisfactory results achieved that its present facilities for post-graduate study, although not ideal, are supplying a real need.

The following is evidence of the cosmopolitan character of the work of the Fellowship as showing the various nationalities represented among those who have enrolled:—

British Isles	243	France	2
R.N.	11	Holland	1
R.A.M.C.	14	Indies—	
R.A.F.	3	East	2
Australia	46	West	2
Canada	13	Latvia	1
New Zealand	15	Malta	2
South Africa	17	Mauritius	1
India	48	Russia	1
I.M.S.	11	Switzerland	5
Egypt	13	Syria	3
Colonial Service	7	? not stated	15
U.S.A.	30		
Belgium	1		511
China	4		

Since the beginning of the year 511 post-graduates have taken out tickets for the various courses, as compared with 161 in 1923 and 399 in 1924. The number of General Course tickets issued for varying periods is as follows:—

For 1923	147
For 1924	226
For 1925	230

Monthly tickets are the most popular.

There are now some 50 Metropolitan Hospitals coöperating actively with the Fellowship of Medicine, and during the past year some 27 of them gave one or more Special Courses in the various specialities, including intensive courses at the General Hospitals.

The figures for the Special Courses are as follows (tickets taken):—

For 1923	66
For 1924	556
For 1925	658

It may be of interest to mention that the complete programme of Special Courses for the year 1926 was published and circulated in Great Britain and abroad in October last.

Discussion.

In March, 1925, a discussion on "Post-graduate Study in London" was held, and arising from the various suggestions received practical courses in anæsthetics are now given, and up to the present time 20 doctors have availed themselves of these courses, despite the fact that only two are allowed to enrol at any one time. In order to meet the need of the post-graduate who has but limited time at his disposal, booklets of 12 or 26 vouchers admitting to the General and Special Hospitals have been introduced, but at present the demand for these is small. Late afternoon courses for the convenience of the general practitioner have been established as part of the Special Course programme. At the beginning of this year weekly clinical demonstrations in surgery were started, and it is hoped that shortly similar demonstrations will be given in medicine, in gynaecology, and in other special subjects.

Journal.

In March, 1925, the *Bulletin* of the Fellowship of Medicine and Post-Graduate Medical Association was discontinued and the contract with the advertising agents was determined. With the permission of your Council preparations for the new Journal were at once put in train, and in October appeared the first issue of the POST-GRADUATE MEDICAL JOURNAL.

The fifth number of the Journal was issued at the beginning of this month. In spite of some difficulty in obtaining contributions dealing with post-graduate matters for the early issues (although promises of such for later issues have been forthcoming satisfactorily) the interest of the individual numbers has progressed steadily, and it is expected that with the coöperation of members of the Fellowship, whose Journal it is, any shortage of volunteered matter will shortly be a thing of the past. The circulation of the Journal as compared with that of its predecessor, the *Bulletin*, has increased substantially more than two-fold, and it is anticipated that before long, perhaps by the end of the summer, the Journal will be paying its way. During the earlier three months of its existence