distal side of the right stump—the best result of the operation was the steady diminution of the tumour, which continues to the present day. Convalescence was unexpectedly rapid, for though I had disturbed structures which had recently been in a state of acute inflammation, there was no high temperature.

The result was that the fibroid has steadily grown smaller, till on March 9th, 1894, it just rose above the pubes (Fig. 4). On the other hand, since January 10th, 1892, when the last period before the operation occurred, down till February 13th, 1894, uterine hæmorrhage has been seen, but without any menstrual molimen, six times. In the spring and summer of 1892 the patient suffered from flushings of the face, though her health was good; in August there was free show for a day or two. The next show was on December 11-12th, and was very slight. On March 8th, 1893, there was slight show for the third time, on May 19-25th free show. One day in August after a sea bath, slight show was noticed. From December 27-29th there was free show. From that date to March 9th, 1894, when I last saw the patient, no show was seen. She has grown very stout, and is in excellent general health. The feeling of weight caused by the size of the tumour when it was large has entirely disappeared, and no attacks of pelvic inflammation have occurred since the operation, nor any painful expulsion of clots. She has never been laid up since through any cause.

CASE VI. Fibroid: Great Anæmia from Menorrhagia: Removal of Normal Appendages One Year and Two Months ago: Great Reduction of Fibroid and Complete Suppression of Catamenia.—E. J., aged 42, single, came under my care in January, 1893, referred to me by Dr. Amand Routh, who had observed her case for over two years. Profuse menorrhagia existed and was clearly due to fibroid disease of the uterus, and Dr. Routh considered the case as favourable for oöphorectomy. The patient was extremely anæmic. The period lasted for a week beginning with perfect regularity once a month. The show was very free so that a dozen napkins were required daily; large clots often passed. When 23 years old she had an attack of hæmatemesis and was dieted for seven months. I examined her and detected a spherical tumour which rose four inches above the pubes and was clearly connected with the uterus. The cervix lay close against the pubes and was continuous posteriorly with a spherical mass which extended into Douglas's pouch and proved to be the lower part of the abdominal tumour. The sound passed five inches into the uterine cavity and the body of the uterus moved independently of the mass. Dr. Routh and myself considered that immediate interference was advisable. I feared delay lest the anæmia should advance so as to become an immediate source of danger, as in the fatal case already described. I operated on February 11th, 1893. As already shown by exploration there was a large fibroid growing from the back of the enlarged uterus. There was the usual alteration in the planes and level of the broad ligaments. Thus the left appendages lay abnormally forward and high up. I had no difficulty in removing them. The right appendages were, on the other hand, far back and rather low down; the tumour could not be rotated so as to bring them forward as it burrowed under part of the right broad ligament. I succeeded in securing and removing the right tube and ovary. The bladder was drawn high up and lay rather in the way. I could detect no ovarian tissue on the distal end of the stumps of the pedicles.

This patient made a good recovery. The period has never recurred since the operation. In June, 1893, the anæmia had nearly disappeared. She complained of severe headaches with free perspirations and a feeling of numbness along the right arm and left fingers. There was also depression of spirits. On February 2nd, 1894, the patient wrote to me from Southend stating that she had resided there since July when her health had begun to improve, all the above-named symptoms disappearing. At the time she wrote her health was excellent and no trace of show had been observed. I have not had an opportunity of examining the fibroid, but according to the patient's account it has disappeared. Such accounts are, however, not always absolutely trustworthy.

The after-histories of these cases show that all the patients derived marked benefit from the operation. In 3 out of the 6 menstruation stopped completely; in 3 it was reduced to a very slight or occasional show of blood. In 1 of the total suppression cases the operation was successfully performed for fibroid disease with dysmenorrhœa, but no abnormal hæmorrhage. In all the tumour of the uterus was reduced more or less. In Case 1, where the menorrhagia was stopped effectually, I have not had the opportunity of examining the patient for four years, but the uterus, judging from the patient's report, is at least much reduced in size. In 4 cases where I have been able to explore the pelvis and abdomen long after the operation, the reduction of the tumour was very marked. In all 6 neurotic symptoms followed the operation. For this reason, among others, patients require care for many weeks after amputation of the appendages for fibroid disease, especially when a period is due. The case may be almost as simple as an uncomplicated ovariectomy, but this very fact must put the surgeon on his guard; otherwise, if he allows the patient to get up before the third week, she will probably suffer from severe pain and from other complications, annoying to herself and discrediting to the operation which with due care has proved so satisfactory.

In respect to failures after removal of the appendages for fibroid, they are almost certain when attempted for the cure of very large fibroids, pedunculated or otherwise, especially where the catamenia remain normal. In cases of bleeding fibroid, failure follows the leaving of follicles in ovarian tissue on the proximal side of the ligature. I know of a case where "menorrhagia" continued after removal of the appendages

by a skilful and experienced operator. A large fibroid polypus was afterwards discovered in the uterine cavity. This proves how necessary it is to use the sound carefully whenever possible. In cases, however, where the cervix is pressed against the pubes, that instrument cannot always be passed, at least to its full extent and without risk, and I have known of serious results following attempts to pass it.

CLINICAL REMARKS

ON

AFFECTIONS OF THE RIGHT SIDE OF THE HEART.

By THOMAS R. BRADSHAW, B.A., M.D., M.R.C.P.,

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THAT affections of the left cavities of the heart should seem to outweigh in importance those of the right side is the natural consequence of the fact that disease on the right side is seldom primary, and that its distinctive signs are commonly overshadowed by those of the conditions with which it is associated. It should, however, be remembered that in most cases of valvular heart disease compensation is chiefly effected by means of an increased activity of the right ventricle, that it is the failure of the latter that precipitates the onset of the common symptoms of backward pressure in the veins, and that so long as the right ventricle can propel the blood the patient may continue to enjoy immunity from urgent symptoms, in spite of extensive valvular disease on the left side. The circulation in such a patient, as I once heard an eminent physiologist observe, in some degree resembles the circulation in the fish. In the fish the blood is driven by the one ventricle through the gills, where it is aerated, and the *vis a tergo* suffices to drive it onwards into the aorta, and so throughout the systemic vessels. In like manner, when there is great destruction of the mitral valve in man, the onward movement of the blood in the aorta must be largely dependent on the *vis a tergo* on the other side of the lungs; and in a certain degree, proportionate to the damage to the valve, the left ventricle becomes a mere channel for the blood to flow through. Such being the case, it is scarcely necessary to insist on the importance of attending to the condition of the right ventricle in the study of cases of valvular heart disease.

By far the most frequent form of valvular disorder on the right side of the heart is tricuspid regurgitation, and as a diseased condition we meet with it almost daily associated with mitral disease—stenosis or incompetence—or with impeded circulation in the lungs from emphysema and bronchitis. The well-known safety-valve action of the heart is a provision by which, when the right ventricle is overdistended, the chordæ tendineæ pull upon certain parts of the tricuspid valve in such a way that it no longer closes during systole, and a certain amount of regurgitation takes place until the ventricle has got rid of the excess of blood it contained. When dilatation more or less permanent has arisen from excessive internal pressure the same mechanism comes into play. We then see the familiar symptoms of impeded circulation in the veins, and we may often distinguish a systolic murmur in the tricuspid area. When a mitral murmur is present it may not be easy to decide whether a tricuspid murmur also exists, but the latter may often be differentiated by its having a point of maximum intensity near the sternum. In cases of dropsy depending on lung disease this murmur is often distinct, and in favourable cases may be observed to diminish in intensity, and even disappear as the patient recovers.

But although increase of pressure in the pulmonary artery usually takes effect on the tricuspid valve, in some cases its action is manifested elsewhere. The well-known effect of high tension in the systemic arteries upon the aortic valves would lead us to look for similar effects on the pulmonary valves when tension is raised in the arteries of the lungs.

Probably pulmonary regurgitation from this cause would be more frequent than it is were it not for the safety-valve action of the right ventricle, and its occasional occurrence was pointed out by Dr. Fothergill.¹ I have little doubt that it was present in the following case.

CASE I. Mitral Regurgitation; Obstructive and Regurgitant Murmurs in Pulmonary Area.—M. M., aged 36, housewife, admitted into the Royal Infirmary under my care in the absence of Dr. Davidson, May 15th, 1893, with dropsy in legs and abdomen. Her illness began eight months before with palpitation and dyspnoea on exertion, followed by swelling in the legs. She denied having ever had rheumatism. When first admitted there was great abdominal distension, which was relieved by successive tapplings, and the pulse was quick; but the general condition improved greatly in two or three weeks, and I was able to note carefully and repeatedly the exact conditions of the heart. The pulse was regular in time and force and of moderate rapidity, and was not in the least suggestive of aortic disease. The impulse was in the sixth left intercostal space, $5\frac{1}{2}$ inches from the middle line and $1\frac{1}{2}$ outside the mammillary line. It was regular and strong and no thrill was felt. The second sound was reduplicated, and was loudly accentuated at the pulmonary cartilage. In the mitral area there was a loud systolic murmur, conducted towards the left axilla, and heard at the back. There was also a loud systolic murmur heard at the right border of the sternum at the base of the ensiform cartilage, apparently due to tricuspid regurgitation. In the pulmonary region two murmurs were heard, the one systolic, the other diastolic. The systolic murmur was loud, had the rough quality of a direct murmur, and was conducted towards the left clavicle; the diastolic murmur was soft; it began with or directly after the second sound, was heard best in the second left intercostal space close to the sternum, and was also audible in the third space and faintly in the first. In the aortic area a much fainter systolic murmur was heard, probably radiated from the left side; but no diastolic murmur was present, nor was one heard at the lower end of the sternum nor in the carotid artery.

Primary endocarditis is as rare on the right side of the heart as it is common on the left, judging from the extreme infrequency with which signs of inflammation, either old or recent, are found in *post-mortem* examinations in this situation. I once found some vegetations, probably recent, about the size of a split pea, on the margin of the tricuspid valve, when I was making a *post-mortem* examination on the body of a patient who died in the Stanley Hospital some years ago; but I have unfortunately not been able to find the notes of the case among the records at the hospital. The following case, treated in the Royal Infirmary, seems to have been one of rheumatic endocarditis affecting the tricuspid valve.

CASE II. Antecedent Rheumatism; Loud Systolic Murmur in Tricuspid Area.—W. J. R., aged 17, errand boy, admitted under my care, in the absence of Dr. Davidson, June 15th, 1893, suffering from some functional nervous disorder, apparently independent of the condition I am about to describe. He stated that he suffered from shortness of breath and swelling of the legs, and that when 11 years old he was treated in the Children's Infirmary for rheumatism and heart disease. While he was under my care a systolic murmur was audible all over the precordium, and was very loud in the tricuspid area. Its point of maximum intensity was at the left border of the sternum at the level of the fourth intercostal space, and it could be heard to the right of the sternum. In passing from the tricuspid to the mitral area it diminished in intensity, and although it was loud in the former situation it was quite inaudible at the back.

In the foregoing instances the murmurs pointed with tolerable clearness to organic disease on the right side of the heart; but it need hardly be said that murmurs in the pulmonary region generally admit of a different interpretation. Not to speak of hæmic murmurs which are always systolic and are hardly likely to be misinterpreted, we sometimes hear a diastolic murmur in this situation, while yet the associated conditions make us hesitate to affirm that pulmonary regurgitation is present. In the following case the interpretation of such a murmur presented no small difficulty.

CASE III. Mitral Stenosis and Regurgitation; Diastolic Murmur in Pulmonary Area probably Aortic in Origin.—F. J., aged 16, confectioner, was admitted under Dr. Caton on June 3rd, 1893. She had had rheumatic fever two years, and a second attack seven months, before admission. The heart was enlarged, its action tumultuous, pulse 96; there was a presystolic thrill at the apex, and a diastolic shock at the second left cartilage. At the apex we heard a long rough presystolic, and a systolic murmur, which together occupied nearly the whole cardiac cycle. In the second left interspace a *brui* was heard with the second sound, having the peculiarity that it lessened in intensity, or even disappeared at the end of expiration. There was no systolic murmur in the same region, but one was heard at the aortic cartilage. The tumultuous action and the presence of loud mitral murmurs throughout nearly the whole cardiac cycle made the exact differentiation of the diastolic murmur very difficult, but the absence of a pulmonary systolic murmur made it unlikely that there was regurgitation, since, according to Dr. Balfour, in all cases of pulmonary regurgitation the murmur has been double. Further, the pulse was somewhat collapsing, and there was visible capillary pulse; the conclusion arrived at was that there was aortic regurgitation, and that the murmur was really aortic in origin. The indications of the sphygmograph are not often of practical value, but the tracing in this case had a percussion stroke of great amplitude, and so far supported the diagnosis of aortic disease. It is not easy to say why the murmur was not heard in the usual situation.

A CASE OF PEMPHIGUS FOLIACEUS.

By C. FIRMIN CUTHBERT, M.R.C.S.,
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THIS case (the accompanying photographs of which were kindly taken for me by my friend Mr. Hodges, of this city) was that of a young woman, aged 27, first seen by me on June 1st, 1892.

She complained of aphthæ on and under the tongue, and on the mucous membrane of the mouth and pharynx. There was considerable swelling of the lips and tongue, salivation, and fœtor. Her condition had been getting gradually worse since March 27th. She was very constipated. She stated that for the previous three summers she had large blisters on the soles of her feet, but walked about on them all the time, with the exception of resting a day or two now and then. The blisters had gradually dried up and the skin peeled off. She had always had tender, sweating, and fœtid feet, and moist, clammy hands. She had had amenorrhœa at 20 for nine months, but dysmenorrhœa was usual. The catamenia commenced at 14, and were regular up to 20. She had been always well as a child, and no medicine had been taken likely to produce her illness. The family history was good. She had used the ordinary drying powders for the blistered feet. She was prescribed boro-glyceride to wash out the mouth and throat frequently, and a chlorate of potash mixture.

Her condition gradually got worse up to June 15th, when bullæ made their appearance over the extensor surfaces of each elbow. A few days later the conjunctivæ became swollen and suffused, and small vesicles were to be seen on them. Bullæ also appeared on the ears, and the lips became much more swollen and painful, so that the taking of nourishment was distressing to her. She was ordered to remain in bed about June 11th.

Her treatment now consisted of charcoal dusted into the mouth at frequent intervals, with the occasional local use of iodoform. For the bullæ lead lotion was kept constantly applied. Internally arsenic and general tonic remedies were employed. Six weeks later the mouth began to clean, and the patient herself improved considerably, and no fresh bullæ made their appearance, but after a few days the mouth became as bad as ever, and large bullæ made their appearance upon various parts—on the axillæ, neck, back, chest, abdomen and legs, and around the anus and vulva; they were intensely irritable and painful. The eyelids, face, and scalp were affected next; the bullæ became confluent, and the masses of excoriated surfaces were covered over with pigmented crusts of a dark brown colour, some being almost black. She had no bullæ on her feet during this time. Her condition from the beginning of August became worse and worse, and during the last three weeks of her life she was scarcely able to be moved at all, and the dressings were extremely painful to her. She had constant diarrhœa, which was followed by exhaustion and death on August 26th. At no time was there any albuminuria or blood in the urine. The fluid in the bullæ was invariably turbid from the first.

The cause of this condition could not be attributed to cold or damp, or bad and insufficient food, or any mental worry; neither was there any suspicion of a syphilitic taint; neither did the scabs leave any but superficial excoriation under them and no ulcer, as under the crusts of rupia.

In his very able work on diseases of the skin, Dr. Jamieson says, "Pemphigus in any form is rare," and classes it under the head of general exfoliative dermatitis; and at page 35 of book his account of the foliaceous variety corresponds with this case. Hebra is quoted as finding that pemphigus foliaceus is more common in women. It is peculiarly malignant, extremely rare, and always fatal.

Erasmus Wilson tells us that amenorrhœa predisposes to pemphigus, and that it occurs usually in people with habitually dry skins, and may be preceded by some poisonous injury. In this case there appeared to be no predisposing cause existing except the amenorrhœa, which, however, was years previous to the commencement of the pemphigus.

Although pemphigus is said sometimes to be accompanied by aphthæ and vesicles on various mucous membrane, this

¹ *The Heart and its Diseases*, 2nd edition, p. 180.