Condition on Admission.—She was cyanosed and had very marked dyspnoea. There was a well-marked systolic thrill in the episternal notch, and in the neck. A soft systolic murmur was heard in the mitral area, and in the aortic area a systolic and a faint diastolic. Over the whole of the chest there were numerous bronchitic sounds. The urine contained 4.2 gr. per oz. of albumen.

Death.—While in hospital the patient became very dropsical, and died suddenly on March 31st.

Autopsy.

Heart and Pericardium.—The pericardium was adherent to the epicardium over the anterior surface of the heart, and in the adhesions there was some calcareous deposit. The right auricle was dilated and its endocardium thickened. The tricuspid orifice was narrowed and the valves showed recent vegetations. The right ventricle was hypertrophied. At the apex there was fatty infiltration. The pulmonary valves were slightly thickened, especially at their margins, and there were several small clusters of recent vegetations at the corpus Arantii. The left auricle was dilated and its endocardium thickened. The mitral orifice was stenosed. The valve segments were thickened, and on the auricular aspect there were irregular vegetations, some calcified, others soft and easily broken down. The left ventricle was hypertrophied. The mitral orifice was narrowed, the cusps were thickened and contracted, and the chordae tendineae were also thickened. The aortic valves were incompetent, were very much thickened by old endocarditis, and also showed some recent vegetations.

The liver showed nothing specially important, and there was no reaction to the iodine test. Microscopically some of the smaller branches of the hepatic artery in the portal tracts gave a definite amyloid reaction with methyl violet.

The spleen was enlarged and soft. The Malpighian bodies were prominent, but gave no reaction with iodine. Microscopically there was very definite amyloid change in the fibrous reticulum of the Malpighian bodies, especially at their periphery, but very little atrophy of the lymphoid cells.

Kidneys.—There was enlargement and pallor. On section the cortex was swollen, pale, and translucent. There was amyloid reaction to iodine in the glomeruli and in the vessels of the pyramids. Microscopically the capillaries of the glomerular tufts showed the degeneration, and there was also very definite change in the straight vessels in the pyramids. The intestine was not examined.

These four cases present many features in common. They were all young subjects who had cardiac disease. In all there is a very definite history of rheumatic fever. The rheumatic attacks were frequent, and in all of them there is evidence that the rheumatic poison, be it what it may, was circulating in the body for from seven months onwards.

In the first case the history points to the first infection being only seven months before the death of the patient; but during that time the attacks had been frequent—in fact, the poison seems to have been absorbed almost continuously during these months.

In the second case the history is of a year's duration, with again frequent attacks of the disease. The third and fourth cases are of several years' duration.

Thus we have in these cases the usual history of amyloid degeneration: a toxin being absorbed fairly constantly for a prolonged period, and, so far as could be made out from the history and from the microscopic examination of the organs, the only poison acting here was that of acute rheumatism. There certainly was neither tuberculosis nor syphilis in any of the cases. Now it is generally admitted, as has been already stated, that the causal toxin is bacterial in origin, and in one case an organism corresponding with the *Micrococcus rheumaticus* was isolated. Lending support to the view that the amyloid degeneration was caused by the poison of rheumatism is the relation of the infection to the only definite clinical manifestation of the degeneration—the diarrhoea. This is recorded in three of the cases (in the fourth there is unfortunately no record, either clinically or *post-mortem*, of the condition of the intestine), and in all it appeared just a short time before death.

The distribution of the amyloid change is also very similar in the four cases, but as this is given in detail in the report of the cases it need not be again referred to.

These cases seem to me to give considerable support to those of us who maintain that acute rheumatism is a bacterial disease, and it is for this purpose and this alone that I bring them forward.

In conclusion, I have to thank Professor Greenfield, Dr. Byrom Bramwell and Dr. James for permission to use the notes of the cases, and my colleague, Dr. Carnegie Dickson, for the *post-mortem* record of one of the cases.

MYOMECTOMY DURING PREGNANCY AND LABOUR AT TERM IN AN ELDERLY PRIMIPARA :

WITH NOTES ON SIMILAR CASES.*

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MYOMECTOMY has often been performed during pregnancy with the most satisfactory results. Gestation is, as a rule, uninterrupted, and when labour sets in the expulsive powers of the uterus seem to be but little impaired. This has been noted even in subjects where the wound in the uterine walls inflicted at the operation was of considerable length, breadth, and depth. The case which I will now relate is mainly of interest because the patient had reached the age of 35 years and was pregnant for the first time. The history of the subsequent first labour is therefore, in my opinion, worth reporting. I will also make some mention of a few other instances of labour in elderly primiparae following myomectomy during pregnancy, taken from the reports of the experience of others published during the current year.

A woman, aged 35, was brought to me for examination at the end of February, 1906. She had consulted Dr. Meerwald, of Maida Vale, on account of amenorrhoea. The last period began on October 25th, 1905. Morning sickness troubled her during November and December. Dr. Meerwald detected a swelling, with all the characters of a gravid uterus, above the pubes, but the pelvic condition appeared abnormal.

The patient was strong and healthy; the abdominal walls showed no lineae albicantes. The body of the uterus could be clearly felt in the hypogastrium, occupying two-thirds of the space between the umbilicus and pubes. The cervix was fairly long and firm; the os externum narrow and oval. A prominent conical body occupied the left fornix; it was very tender when pressed, and moved slightly with the uterus. On rectal examination it was found to lie in front of the bowel. The upper limits of the body in the pelvis could not be clearly defined. The patient's general condition was satisfactory.

Thus there was evidently a morbid growth connected with the posterior part of the lower segment of the uterus, most probably a fibroid likely to prejudice labour. Considering the small risk, even of interruption of pregnancy, which attends myomectomy, I decided to operate, although the tumour lay in a rather awkward position for manipulation without much disturbance of the gravid uterus.

Operation.—On March 6th I operated, with the assistance of Mr. Butler-Smythe. Mr. Morley administered ethyl chloride, followed by ether and then chloroform. The pelvis was elevated. I prolonged the abdominal wound to 1 in. above the umbilicus, so that I was enabled to draw out the gravid uterus and examine its lower and posterior aspects without dragging or pressing. I then discovered two subserous, pedunculated growths springing from the posterior aspect of the inferior uterine segment, close to the left border of the uterus. By cautious rotation of the uterus towards the right I was able to bring the two growths out of the lower part of the abdominal wound. Gauze pads were packed behind the uterus and in the left iliac region. The smaller growth was 2 in. long, very tough, and attached to the uterus by a short vascular pedicle, awkwardly near to the larger tumour. It would hardly have interfered with labour, but I found that I could not very well reach the bigger outgrowth until I had removed it. I enucleated it in part, split it open, and then was able to secure its pedicle by transfixion with No. 4 China twist.

The larger growth was now more conveniently placed for removal. It measured over 4 in. in length and 2 in. at its broadest part, and it ended in the very blunt point so prominent in the pelvic cavity when the patient was examined. The pedicle was relatively thick. I enucleated the growth to a certain extent after splitting it, and closed the remains of the capsule with a No. 1 continuous silk suture; then I transfixed it with stouter silk. The growth, a calcified fibromyoma, adhered strongly to the capsule, so that only a short piece of capsule could be saved. On that account I was compelled to transfix, as not until the transfixing suture was tied could I stop the bleeding. The peritoneum was closed with No. 1 Van Horn catgut; the integuments and sheath of the recti with interrupted silkworm gut.

There were no complications during convalescence, nor in the further course of the pregnancy, which went on to

* A paper read before the Obstetrical Society of London, November 7th, 1906.

full term. The patient was attended by Mr. W. H. F. Oxley, of Poplar, to whom I am indebted for the following report of the labour:

Mrs. — sent for me first on August 10th. She was then having pains about every ten minutes, and the os was of the size of a shilling, the vertex presenting in the occipito-posterior position. The membranes were very thin and ruptured after the first examination. There was very little liquor amnii.

The pains continued fairly strong, about every five minutes during the next three days. A sedative draught each evening gave relief for about a couple of hours.

On the 13th I was able, though with great difficulty, to introduce the forceps under chloroform through the os, which was then not much larger than half a crown.

There was no trouble in extraction. I think that the age of the patient, coupled with the early rupture of the membranes and the position of the head, was sufficient to account for the slow dilatation of the os, and I do not think that the operation had any effect whatever upon the course of labour.

The uterus contracted well after extraction.* There was no pelvic deformity.

On September 14th the patient came to see me at the Samaritan Hospital, bringing her infant, a healthy female child. She had suckled it for about a week, but it did not thrive until it was fed artificially.

The patient herself was in very good health. The abdominal wound had healed well, and was deeply pigmented along its entire course†. The uterus could be freely moved, involution was perfect, and the fornices were quite free. I failed to detect anything abnormal in the posterior part of the inferior segment of the uterus, the seat of the myomectomy. The cervix was slightly lacerated on the left side of the os; the perineum was entire.

MYOMECTOMY AND ELDERLY PRIMIPARAE.

The patient was 35 years of age, and carried the child to term. The first stage was long; but, as I have explained, there is no evidence that the delay was due to the operation. The child was saved and reared.

Recently published reports show that, as in my case, the gravid uterus in an elderly subject pregnant for the first time tolerates myomectomy. Thring, of Sydney,¹ enucleated a necrotic interstitial fibroid, of the size of a large orange, from the anterior wall of the uterus of a woman aged 38, in the sixth month of her first pregnancy. "At one point the mucous membrane lining the uterine cavity was exposed." Yet the patient was delivered spontaneously of a healthy living child at full term. On the other hand, a woman, aged 40, underwent myomectomy at the end of the sixth month of her first pregnancy, but aborted thirty-six hours after the operation. In this instance, however, the operation was severe, as the fibroid, enucleated through an incision made in the fundus and anterior surface of the uterus, was "about equal in size to an ostrich's egg." The fetus, placenta, and membranes came away easily, but the uterus did not contract well and the temperature rose. After the use of the curette on the fifth day the patient recovered.

Dr. Joseph Stewart, of Leeds,² recently operated on a woman aged 35 in the sixth month of her first pregnancy. There had been symptoms simulating axial rotation of an ovarian cyst. He enucleated a large sessile fibroid attached to the left of the fundus, rotating the gravid uterus somewhat towards the right. A large gap was left not easily closed. According to the published report, "the patient was delivered of a boy at full term."

Dr. Stewart has kindly sent me fuller details of the labour. It ended spontaneously in six hours and a half; the head was in the first position, and the liquor amnii seemed normal in amount. There was no difficulty about the expulsion of the placenta.

I was chiefly interested in the contractions of the uterus; they were normal so far as I could make out. I could discover no indentations representing the spot from which the tumour had been enucleated.

A general survey of current opinions and experience relating to the treatment of fibroids during pregnancy lies beyond the limits of this brief communication. I may refer the reader to Dr. Amand Routh's³ recently published lecture on the subject; and to Tuffier and de Rouville's memoir,⁴ read and discussed at the Lisbon meeting of the

International Medical Congress. References to earlier writings about myomectomy in pregnancy will be found in a report of a case in my own practice, where the patient was a primipara 28 years of age.⁵ I removed, during the second month, a sessile fibroid over 2 lb. in weight from the back and fundus of the uterus. Labour took place at term, and was lingering on account of breech presentation and hydramnion; but the child was saved and reared. I mention this case because the age (28) is beyond the average for primiparae in the United Kingdom. The great excess of liquor amnii in this instance of labour after myomectomy is worth noting, as in the case which I have reported above in full it was very deficient. The relation of the excess or deficiency to the operation is not evident.

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CONGENITAL LARYNGEAL STRIDOR.

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DISCUSSION on the nature of this interesting affection has generally revealed a difference of opinion upon two points, namely, the appearance of the larynx and the mechanism of the stridor. This want of agreement is due to the difficulties of laryngoscopic examination in children, which are so increased in this affection by the great excursion of the larynx that trustworthy observation is well-nigh impossible. It is true that with a laryngeal mirror one may recognize during the early stage of inspiration a curved epiglottis, with its lateral margins touching and the aryepiglottic folds lying so close as to leave only a small intervening slit; further observation is, however, prevented by the rapid descent of the larynx, and we are left to conjecture what is happening. In these circumstances the direct method of examination becomes of great value, and indeed the only possible means of accurate investigation, and the purpose of this short paper is to place on record some observations thus made on five children within the last two years.

The cases, whose ages varied from 8 months to 2 years, were of the classical type so well described by Thomson.¹ Examination took place under chloroform by means of the Killian tube-spatula, with the parts about the pharynx and larynx well cocaineized. The influence of irregular and convulsive action of the respiratory muscles as a factor was eliminated, for, in all, stridor became more marked the deeper the anaesthesia. On the other hand, it varied notably with the position of the patient, being most evident in the dorsal posture, distinctly less on the side and with the tongue pulled out, whilst it was very definitely relieved by placing the tube-spatula on the base of the tongue and tilting it forwards.

On passing the tube-spatula the curving of the epiglottis was noted in varying degree and the approximation of the aryepiglottic folds, but the most striking appearance was the extraordinary excursion of the posterior wall of the larynx. With each inspiration the soft parts on the cricoid, including the arytenoids and the interarytenoid fold, disappeared, so to speak, into the interior of the larynx, being drawn downwards and forwards, and to such an extent in pronounced cases that the upper border of the cricoid could be seen as a transverse ridge through the stretched mucous membrane. The accompanying diagrams (Figs. 1 and 2) show this change in position of the posterior wall. It was this movement which produced the stridor. With the aryepiglottic folds coming into close apposition during inspiration, the passage of air was only possible by the downward and forward displacement of the posterior wall through suction, and it was the vibration of this section of the laryngeal entrance which gave rise to the noisy stridor. This was confirmed when

* There was no post-partum haemorrhage.

† On March 29th, the day of her discharge from the hospital, I observed slight pigmentation around the suture tracks.