With a little education of the eye, any stone—oxalate, urate, or phosphate—can be detected in the kidney or its pelvis, if sufficient strength of *x* ray is employed and the screen is held near the organ.

Figs. 4 and 5 represent the visual appearances of these

Fig. 5.—Radiograph of phosphatic and uratic stone in pelvis of kidney. three classes of calculus. The screen, which can be much improved, is of a kidney shape, so as to be easily adaptable to the edge of the loin. It was made for me by Mr. Montague, of New Bond Street, who has kindly helped me throughout the work.

The disadvantages of the method are as follows:

1. The kidney must be brought on to the loin, and it is not every kidney that can be dislocated. In some the vessels are too short, in others the kidney is fixed high up under the ribs, and the operator may at once feel that free separation ought not to be risked. Women, of course, are easy subjects for renal dislocation—in fact, renal surgery in women bears no comparison, as regards difficulty, with that of men.
2. The operating room must be absolutely dark, and the initial steps of exposing the organ of course need a fair light.
3. The rays ought to be from a 10-inch coil, and concentrated upon the kidney, the tube being placed near the organ.
4. The screen used must be a good one, for there are many screens on the market which do not deserve the name of a fluoroscope. It should be made so that it can be rendered aseptic, and must be brought near the kidney.

In Fig. 5, which is introduced to emphasise the fact that the kidney is exposed, the fluoroscope is, for the sake of clearness, placed too far off the kidney.

THE EXAMINATION OF ONE HUNDRED CASES OF TYPHOID FEVER BY WIDAL'S SERUM TEST.*

BY
JAMES COLVILLE, M.D., and W. D. DONNAN, M.B.
(From the Pathological Laboratory, Queen's College, Belfast.)

SINCE the end of February last we have examined, by Widal's method, the serum of 132 cases in the pathological laboratory of Queen's College, Belfast.

* Read at the Annual Meeting of the North of Ireland Branch of the British Medical Association.

Belfast is an excellent centre for any investigation concerning typhoid fever, as the disease is pretty well endemic here. During the past spring and early summer there has been quite an epidemic, 1,293 cases with 127 deaths having been notified to the medical superintendent officer of health from March 1st to June 23rd, 1897.

The technique employed has been as follows: We have modified the collecting tubes recommended by Professor Delépine by drawing out in a blowpipe flame pieces of glass tubing from $\frac{1}{8}$ to $\frac{1}{4}$ inch calibre, so as to form small elongated bulbs with long tapering ends. A finger of the patient, after being carefully cleansed with soap and absolute alcohol, is pricked with a sterile needle: the two ends of the tube having been broken off, one end is inserted into the drop of blood, which then rises in the tube by capillary attraction. Sufficient blood having been obtained (about two drops), the ends are again sealed in the flame, care being taken to first seal the end which is next to the blood. The tube should be kept upright, with the blood end downwards till required for use. After the serum has separated the lower sealed end is again broken off, and the serum expelled on to a sterile glass slide by heating the other end of the tube. One loopful of this is thoroughly mixed by means of a platinum loop with ten loops of a twenty-four-hour old broth culture of bacillus typhosus. A loopful or two of the mixture is then placed on the centre of a clean coverglass, inverted over a hollow slide, and examined under the microscope, $\frac{1}{4}$ inch objective being the most suitable power to use. A fresh broth tube is inoculated every day from the preceding one, it being well to do this as a preliminary measure to avoid the risk of contamination.

At intervals of three weeks or so we make an agar plate culture, and start fresh growth from a separate colony, as otherwise the bacilli are apt to become sluggish. It is also well to isolate fresh strains from any typhoid *post-mortem* examinations as opportunity offers.

On now examining the preparation, and supposing it to be a typical case, a very marked change is observed. The bacilli, which were formerly extremely active and uniformly distributed over the field, are now motionless and clumped in masses, the intervening portions of the field being clear. The foregoing may be considered the complete reaction, and usually takes place either immediately or within a few minutes; this is what is observed in the majority of cases.

Occasionally (that is, in cases which are not typical) no change is noticed for from ten to twenty minutes; then an imperfect reaction occurs in which either (1) there are quite distinct clumps, but some limited movement still persists, both in isolated bacilli and in the members of the clumps, whilst the field is not entirely cleared; or (2) the bacilli are motionless but the clumping is poorly developed; this latter is not of frequent occurrence as far as our observations go. With blood serum, other than typhoid, no reaction takes place; the bacilli continue to move freely, imparting their motion to any blood corpuscles which have remained in the serum, and there is no attempt at clumping.

As will be observed, we have used a dilution of 1 to 10, following Delépine. In some of our later cases we have also diluted the serum with normal salt solution to make a 1 to 20 dilution, which seems to be preferable, as the clumps are more sharply defined, owing to the reduction in the number of bacilli. We have adopted Grünbaum's half-hour limit for observing the reaction.

A glance at the appended tables will show that we have divided the cases broadly into two divisions, namely, those clinically typhoid and those clinically non-typhoid; subdividing the first into four classes—(a) reaction immediate and complete; (b) reaction incomplete, but complete, or nearly so, when retested at a later date; (c) reaction incomplete but not retested; (d) no reaction. The total number of cases in this division is 105. Of these, 84 gave a complete reaction, 12 an incomplete reaction, more complete subsequently; 7 an incomplete reaction not retested, whilst in 2 cases we failed to get any reaction.

The second division comprises:

(1) Cases clinically doubtful at the time, which subsequently ran a non-typhoid course. Total 13, all giving no reaction.

(2) Cases certainly not typhoid. Total 7.

(1)—Cases Clinically Typhoid in which Reaction was:
A.—Complete and Immediate or nearly so.

No. of Case.	Date of Examination.	Sex.	Age.	Date of Disease.	Remarks.
1	27/2/97	M.	18	29th day	
2	27/2/97	M.	23	12th "	
3	1/3/97	M.	43	38th "	
4	1/3/97	M.	17	33rd "	
5	5/3/97	F.	26	11th "	
6	15/3/97	M.	8	13th "	
7	15/3/97	F.	58	8th day	In 10 minutes. Died next day.
9	15/3/97	M.	17	14th "	
10	15/3/97	M.	15	9th "	
11	18/3/97	M.	40	14th "	Diagnosis lay between typhoid and delirium tremens. At first looked like acute tuberculosis. Mother took disease later.
12	22/3/97	F.	8	12th "	
13	22/3/97	M.	28	16th "	
14	30/3/97	M.	27	6th "	Mild case.
15	30/3/97	M.	8	7th "	
16	13/4/97	M.	2	2nd week	Diagnosis lay between typhoid and pneumonia.
17	15/4/97	—	—	6th day	In 15 minutes.
18	15/4/97	—	—	9th "	In 10 minutes.
19	17/4/97	F.	5	5th week	
20	22/4/97	F.	7	10th day	
21	23/4/97	M.	17	32nd "	
22	23/4/97	M.	28	22nd "	
23	20/4/97	M.	28	12th "	Died 9 days later.
24	30/4/97	M.	10	10th "	In 10 minutes.
25	30/4/97	F.	6½	13th "	
26	30/4/97	M.	7	8th "	In 10 minutes.
27	5/5/97	M.	24	25th "	In 10 minutes.
28	5/5/97	M.	21	13th "	
	27/5/97	M.	21	12th "	Second observation during a relapse.
29	10/5/97	M.	25	13th day	(of relapse)
30	11/5/97	M.	35	20th "	At first considered influenza, later diarrhoea and rose rash.
31	12/5/97	F.	3	4th "	Died on 5th day day with acute diarrhoea.
32	12/5/97	F.	2½	17th "	
33	12/5/97	F.	7	25th "	
34	12/5/97	M.	10	33rd "	Brother of Case 33. Temperature normal nine days.
35	14/5/97	F.	8	4th week	
36	14/5/97	F.	6	3rd "	
37	14/5/97	F.	19	22nd day	
38	14/5/97	M.	23	11th "	
39	17/5/97	M.	19	24th "	
40	17/5/97	M.	36	17th "	In 10 minutes.
41	18/5/97	F.	24	18th "	
42	19/5/97	—	—	—	
43	26/5/97	—	—	3rd week	
44	26/5/97	—	—	3rd "	
45	26/5/97	F.	25	12th day	
46	27/5/97	M.	22	Convalescent	
47	3/6/97	M.	22	7th day	
48	7/6/97	F.	12	8th "	
49	7/6/97	F.	30	9th "	
50	10/6/97	M.	6	2nd week	
51	15/6/97	M.	25	18th day	In 5 minutes.
52	16/6/97	M.	55	4th week	
53	16/6/97	M.	28	17th "	
54	16/6/97	M.	16	18th "	
55	16/6/97	F.	—	—	Convalescent 1 month.
56	17/6/97	M.	23	14th day	In 5 minutes. Complicated by head injury.
57	17/6/97	F.	24	10th "	Pyrexia high, 104.5°.
58	25/6/97	F.	26	17th "	In 10 minutes.
59	30/6/97	M.	30	15th "	
60	30/6/97	M.	30	9th "	Only 3 days off work.
61	2/7/97	F.	2½	6th "	Mild case.
62	3/7/97	M.	22	5th or 6th week	
63	3/7/97	M.	30	11th day	
64	3/7/97	M.	30	11th "	
65	3/7/97	M.	24	—	
66	6/7/97	M.	21	50th day	
67	6/7/97	M.	40	14th "	
68	6/7/97	M.	34	15th "	
69	6/7/97	M.	25	19th "	
70	6/7/97	M.	26	21st "	
71	14/7/97	M.	26	29th "	
72	14/7/97	M.	25	46th "	
73	14/7/97	M.	25	14th "	
74	15/7/97	M.	27	34th "	Some desquamation; possibly complicated by scarlatina.
75	15/7/97	F.	20	22nd "	Wife of Case 74.

A.—Complete and Immediate or nearly so—continued.

No. of Case.	Date of Examination.	Sex.	Age.	Day of Disease.	Remarks.
76	15/7/97	M.	15	23rd "	
77	15/7/97	M.	11	23rd "	Temperature 101°.
78	15/7/97	M.	9	14th "	Temperature 103.4°.
79	15/7/97	M.	50	26th "	Father of Case 78.
80	15/7/97	M.	12	21st "	
81	15/7/97	M.	24	15th "	Had a hæmorrhage previous day.
82	15/7/97	F.	18	18th "	
83	15/7/97	F.	10	35th "	11th day of a relapse.
8	20/7/97	M.	28	—	Convalescent a fortnight. Did not seek medical advice till convalescent.

(3) Cases who had suffered from typhoid at a previous period. Total 3.

Four cases we have been obliged to group as unclassified, as will be explained later. Thus of 105 cases of undoubted typhoid fever, only 2 failed to give the reaction, whilst of the 20 non-typhoid cases only 1—a case of typhus fever—reacted.

We feel strongly convinced of the great value of this test, and in several doubtful cases have been able to give an opinion which subsequent history has fully confirmed.

Surely a method which has in this instance proved to be correct in over 98 per cent. of cases must undoubtedly have a very solid foundation. We believe that after more extensive application of the method, and when the causes and meaning of the reaction are better understood, the percentage of errors will likely be eliminated, and it is more than probable that by means of this test many a mild and puzzling case will be diagnosed with a certainty where hitherto the clinician has been compelled to remain in doubt. We refer more particularly to the so-called gastric fevers of childhood, which are often exceedingly anomalous. The earliest day of disease on which we obtained the reaction was the fourth. In many cases a good reaction has been seen on from the sixth to the ninth day. Apparently a marked reaction is almost undoubted evidence of typhoid, but its absence is not so conclusive against the disease. It is necessary to reserve the opinion and ask for another sample at a later date (say a week) if the clinical signs remain suspicious; thus in Cases 88, 89, and 96 no reaction was seen when first tested, although it was found on retesting at a later date.

We have observed what might be termed a cumulative reaction in a number of cases, that is, when first tested, the reaction is absent or very incomplete, later more complete, and perhaps not fully complete till convalescent has been well established.

Cases 88, 89, 91, 92, 93, and 94 are good examples. We do not attempt to offer any explanation of this phenomenon, nor can we explain why in some cases this paralyzing and agglutinative property should be developed at an early stage, whilst in others it should be so slowly formed. The majority of the cases showing a cumulative reaction were mild ones, but this did not hold universally, and some mild cases also gave a well-marked early reaction.

Let us look for a moment at a few of the more interesting cases.

In the first division, that is, those clinically typhoid, there is not much to note except, perhaps, that Case 56 exemplifies well the utility of the test. This man was admitted to hospital suffering from a severe head injury owing to a fall from a height. The temperature rose in a few days, and was naturally thought to depend on septic trouble; but none being found, whilst the temperature remained elevated, a sample of his blood was sent to us. It gave a well-marked reaction, the man evidently having been in the incubation stage of the disease when he met with the accident; the disease subsequently ran a typhoid course.

Case 28 was examined both before and during a relapse. Case 83 was first examined during the relapse. The reaction was well marked in both.

Turning to the two apparently undoubted cases of typhoid fever which failed to react, Case 104 was, as far as symptoms go, a mild attack, with three weeks fever and some typical

diarrhoea. Her blood has been tested on three separate occasions. We learn that since this paper was compiled she has had a relapse.

B.—Incomplete, but Complete or more nearly Complete when Tested at a Later Date.

No. of Case.	Date of Examination.	Sex.	Age.	Day of Disease.	Reaction.	Remarks.
85	1/3/97	F.	29	18th day	Incomplete	
	5/3/97	F.	29	22nd "	Complete	
86	14/4/97	M.	4	3rd or 4th week	Incomplete	Complicated by broncho-pneumonia.
	17/5/97	M.	4	3rd or 4th week	Complete	Died a few days later.
87	4/5/97	M.	7½	8th day	Incomplete	Symptoms meningeal.
	10/5/97	M.	7½	11th "	Complete	Now clinically typhoid.
	22/5/97	M.	6	4th "	None	
	29/5/97	M.	6	11th "	Slight clumping	
	2/6/97	M.	6	16th "	A little better marked	Temperature normal this day.
88	12/6/97	M.	6	25th "	Good reaction in 10 minutes	
	3/7/97	M.	6	7th week	Immediate and complete	
89	5/6/97	F.	12	11th day	None	
	15/7/97	F.	12	Convalescent	Complete in 15 minutes	
	9/6/97	F.	30	14th day	Slow and imperfect	
90	11/6/97	F.	30	16th "	Complete in 10 minutes	
	12/6/97	M.	6	17th "	Incomplete	Symptoms broncho-pneumonic, but spleen enlarged.
91	3/7/97	M.	6	39th "	Complete and immediate	
	15/6/97	F.	11	8th "	Incomplete in 15 minutes	Mild case.
92	25/6/97	F.	11	18th "	Incomplete in 15 minutes	
	6/7/97	F.	11	29th "	Complete in 5 minutes	
	6/7/97	M.	21	11th "	None in ½ hour	
	14/7/97	M.	21	17th "	Incomplete in ½ hour	Severe case.
93	20/7/97	M.	21	24th "	Complete and immediate	
	6/7/97	M.	17	6th "	Incomplete in 10 minutes	
94	21/7/97	M.	17	21st "	Complete in 10 minutes	Temperature normal.
	15/7/97	F.	30	6th week	Incomplete in ¾ hour	
95	21/7/97	F.	30	7th "	Fairly good in 20 minutes	
	15/7/97	M.	26	49th day	None	Tested on 10th day by Dr. Lynass, with negative result.
96	21/7/97	M.	26	54th "	Incomplete in ½ hour	

C.—Incomplete; not retested at a Later Date.

97	18/3/97	M.	35	—	—	
98	18/3/97	M.	—	—	Bacilli motionless; clumps not well marked	Died from hæmorrhage a few days later.
99	14/5/97	F.	—	—	In 20 minutes	Infected from husband.
100	14/5/97	F.	3	8th day	In ½ hour	
101	17/5/97	M.	26	7th "	—	
102	9/6/97	M.	15	14th "	In 20 minutes	
103	9/6/97	F.	33	8th "	Bacilli motionless; clumps poor	Died on 15th day from bronchial complications.

D.—Absent.

104	29/6/97	F.	124	5th day	None	Mild case; typical stools and temperature.
	5/7/97	F.	24	11th "	"	Temperature normal at end of 3rd week.
	21/7/97	F.	24	26th "	"	Complicated by phthisis at right apex. Has had hæmorrhages.
105	15/7/97	M.	28	23rd "	None	
	21/7/97	M.	28	28th "	None after 1 hour	

Case 105 is complicated by phthisis in the right apex, and is not yet convalescent. His blood has been twice examined. This case may possibly throw some light on Case 129, which is one of our four unclassified cases. In it the patient, whilst suffering from an apparently clear attack, there having been one hæmorrhage, failed on two occasions (twenty-sixth and fifty-seventh day) to give any reaction. He died shortly afterwards, and at the post-mortem examination general acute

(2)—Cases in which Diagnosis was Doubtful at the time: Subsequent History not Typhoidal.

No. of Case.	Date of Examination.	Sex.	Age.	Day of Disease.	Reaction.	Remarks.
106	22/3/97	F.	16	15th day	None	
107	23/4/97	M.	17	5th or 6th week	"	Sent into hospital at end of supposed attack.
108	10/5/97	F.	9	6th day	"	Temperature normal this day.
109	18/5/97	M.	32	7th "	"	Pneumonia; died.
110	26/5/97	M.	10	2nd week	"	Bronchitis.
111	5/6/97	M.	4	8th day	"	
112	2/6/97	M.	18	18th "	"	Anomalous case with alternating high temperature and apyrexia, each lasting a few days.
113	15/6/97	M.	19	7th "	"	Slight pleurisy.
114	14/7/97	M.	23	4th "	"	Acute diarrhoea with febrile symptoms.
115	15/7/97	F.	22	3rd month	"	At first considered typhoid, but abdominal swelling has persisted with hectic temperature, probably tuberculous peritonitis.
116	20/7/97	M.	19	10th day	"	
117	21/7/97	M.	20	30th "	"	Case of meningitis.
118	3/7/97	M.	20	—	"	Colic with slight fever.

(3)—Cases certainly not Typhoid.

119	18/3/97	F.	30	—	None	Typhus fever.
120	18/3/97	M.	35	—	Well marked	Typhus fever; patient too stupid to ascertain whether ever had typhoid.
121	20/3/97	M.	27	—	None	Healthy individual.
122	17/5/97	F.	25	—	"	"
123	26/5/97	F.	65	—	"	Case of "bronze skin."
	22/6/97	M.	28	—	"	Malaria; six months returned from India; taken between paroxysms.
124	2/7/97	M.	28	—	"	During paroxysm; temperature 105.2°.
125	6/7/97	F.	24	—	"	Healthy individual.

tuberculosis was found, although there was also a suspicious condition of Peyer's patches in the lower portion of the ileum. The possibility of its having been tuberculosis all along naturally suggests itself. However, thinking that the presence of tubercle might have some inhibitory effect, we obtained some serum from a well-marked case of phthisis with hectic temperature and abundant bacilli in the sputum, and mixed it with an equal quantity of serum from a typhoid case giving a good reaction. The result of our experiment, as far as our theory went, was negative, the mixed serums clumping just as well as the pure typhoid serum. It might be that the effect *in corpore* is different from that *in vitro*.

With regard to the remaining unclassified cases, in Case 130, which showed a suspicious pyrexia in an alcoholic subject, we could not obtain another sample of blood, and we are inclined to believe that we might have got a reaction at a later date, especially as the patient suffered from a fortnight's relapse during convalescence.

Case 132 is suffering from dorsal caries with slight temperature. The patient had a suspicious illness last summer, lasting a month, which the child describes as "inflammation." Her blood gave an imperfect reaction.

Case 131 was a lingering case of periuterine inflammation, in which the temperature remained elevated for short periods. Although there was an element of doubt about the case it never appeared to resemble typhoid clinically. On two occasions her blood gave a very imperfect reaction. She never had typhoid previously.

We regret that we obtained only three cases who had suffered from typhoid at a previous period. One six and one twelve months convalescent failed to react, whilst the third, fourteen months convalescent, gave an imperfect reaction. This case is interesting in that she is now the subject of tuberculous peritonitis with high temperature, and is a good example of the necessity for being on guard as

to whether the patient had ever before gone through an attack of the disease.

(4)—Cases who had suffered from Typhoid at a Previous Date.

No. of Case.	Date of Examination.	Sex.	Age.	Day of Disease.	Reaction.	Remarks.
126	16/3/97	—	—	6 months	None	
127	27/5/97	M.	21	1 year	"	
128	12/6/97	F.	16	14 months	Imperfect	Now suffering from tuberculous peritonitis with pyrexia.

(5)—Unclassed Cases.

129	27/2/97	M.	22	26th day	None	Apparently typhoid clinically, with one hæmorrhage, but temperature remained elevated, and death ensued, the <i>post-mortem</i> examination revealing general tuberculosis, although Peyer's patches were prominent and discoloured.
	30/3/97	M.	22	57th "	"	
130	26/5/97	M.	41	3rd week	"	A suspicious case of pyrexia in an alcoholic subject. During convalescence there was a relapse lasting a fortnight. Could not obtain a second sample of blood.
131	2/6/97	F.	45	3rd week	"	Was suffering from peritoneal trouble in May. Since then temperature has occasionally for a time risen two degrees above normal at night.
	12/6/97	F.	45	—	Very slight small clumps, but good deal of movement	
	9/7/97	F.	45	—	Ditto	
132	8/7/97	F.	71	—	Movement stopped in 10 minutes, but clumps prove imperfect	Has dorsal caries, with slight hectic temperature. Had a suspicious illness last summer, "inflammation" lasting a month.
	21/7/97	F.	71	—	Fair clumps in 10 minutes, but field not quite clear	

Of the non-typhoid cases one case of typhus fever (Case 120) gave a good reaction. We can only explain this by supposing that he had had typhoid previously, but this could not be satisfactorily ascertained. Another case of typhus fever tested on the same date gave absolutely no reaction, and this accords with the experience of other observers.

With a view to test Bates Block's statement that cases of malaria will react, we obtained serum from a well-marked case of this disease (Case 124), both during a paroxysm and in the interval, and at neither period was any reaction observed.

Of the total cases examined, 34 were obtained from the Belfast Royal Hospital, 37 from the Belfast Union Fever Hospital and Infirmary, 8 from the Ulster Hospital for Women and Children, 8 from the Queen Street Hospital for Sick Children, and 9 from the Garrison Hospital. The remaining 36 cases were sent in by private practitioners.

Our warmest thanks are due to Dr. J. Lorrain Smith for permission to work in his laboratory, and for many valuable suggestions while the work was in progress.

PERIPHERAL NEURITIS CONNECTED WITH PREGNANCY AND THE PUERPERAL STATE.

By ERNEST SEPTIMUS REYNOLDS, M.D.LOND., F.R.C.P.,
Senior Physician to the Ancoats Hospital, Manchester; Visiting Physician to the Manchester Workhouse Infirmary,

In paralysis occurring during pregnancy or the puerperium the seat of the lesion may be either in the brain, as from hæmorrhage or thrombosis; in the spinal cord, as from some form of myelitis; or in the nerve trunks. Of paralyzes due

to lesion in the nerve trunks it is easy to distinguish two widely different groups of cases—namely (1) those due to injury or disease of the nerve trunks, as they pass through the pelvis; and (2) those due to neuritis occurring at the periphery of the nerves, and in which the nerves affected do not necessarily pass through the pelvic cavity.

Of the paralyzes due to affection of the nerve trunks as they pass through the pelvis I intend to say but little. They are more commonly due to injury of the nerves by forceps when the symptoms are generally unilateral, setting in with severe sudden pain at the time of injury (sometimes followed by anæsthesia of the part supplied by the injured nerve) and followed by paralysis of the extensors of the foot and tensor vaginae femoris supplied by the external popliteal and superior gluteal nerves, the pressure having been applied to the lumbo-sacral cord and the roots of the sacral nerves. Cases of this nature have been recorded by Bury,¹ Thomas,² Bernhard,³ Mills,⁴ and many others. More rarely paralysis has resulted from pressure of the head of the child on the pelvic roots during prolonged and difficult labour, as recorded by Vinay,⁵ Ramskill,⁶ and Lloyd Roberts.⁷ Other cases of paralysis of the legs from a lesion of the large nerve trunks in the pelvis have had a very different cause, as in a case described by Leyden,⁸ where paralysis came on in the lower extremities with neuralgic pains in the sciatic nerves after puerperal fever, and on *post-mortem* examination there was found phlegmonous infiltration of the cellular tissue of the pelvis, implicating the sheaths of both sciatic nerves. Adams⁹ reports a case where a pelvic abscess coming on after confinement caused a unilateral paralysis.

I have seen a case in which a severe double sciatica led to the discovery of a fibroid tumour of the uterus impacted in the brim of the pelvis. An operation was performed and the tumour was lifted up and fixed to the anterior abdominal wall. There was no septic mischief, and the operation was entirely successful, but the pains in the legs still continued and were followed by double atrophic paralysis of the anterior tibial and peroneal groups of muscles, and afterwards of the muscles of the calf, with marked œdema in both legs. These symptoms progressed in spite of the fact that the fibroid growth not only remained in the position in which it had been placed, but also, from the menopause setting in, diminished until the uterus was practically of the normal size and the whole pelvic cavity was apparently normal, as ascertained by careful bimanual examinations made by most competent gynecologists. It would seem as if the symptoms had been produced by a chronic inflammation of the nerve sheaths in the pelvis set up by the pressure, just as may possibly occur very rarely by pressure of the head of a foetus.

I wish to deal, however, more particularly with those cases in which peripheral neuritis comes on, either during pregnancy or the puerperium, and in which many nerves are affected (not necessarily only those which pass through the pelvic cavity), and in which there is evidence of true peripheral neuritis, similar to that found after taking alcoholic and other poisons. These cases, judging from the few reported, do not seem to be very common, but this may be because they are not sufficiently recognised.

The two following cases have occurred in my practice:

CASE I. Vomiting of Pregnancy, Abortion Procured; Peripheral Neuritis following and affecting both Legs; Gradual Recovery.—Mrs. D., aged 24 years, was married in April, 1895. In November, 1895, she was about four months pregnant, and was suffering from such severe and uncontrollable vomiting that abortion had to be procured. For two or three weeks after this she had complete loss of power over the bladder and rectum, but these symptoms passed off in a fortnight, and never troubled her again. About a month after the abortion had been procured her feet felt very cold and numb; a month after this she found that her legs were very weak, and sensation in them was almost entirely abolished; there was no affection of the upper extremities. The loss of power became complete, she could not stand or walk, the legs were wasted, and finally the knees became contracted and fixed. This condition continued in spite of treatment, and when she first came to Manchester, in July, 1896, the legs were in the same flexed position, with marked talipes equino-varus of both feet, and extreme wasting and total paralysis of the lower extremities, and absence of the knee-jerks. There was some power of flexion of the hip-joints and she could move the great toes very slightly; there was some loss of sensation in the toes. The knee-joints were straightened five times under chloroform, and fixed in splints. Electricity and massage were employed, and the condition improved much for a time, and then became stationary.

I first saw the patient in consultation with Dr. Grosvenor, of Manchester, in October, 1896, when I found all the muscles of the legs, and to a less extent the muscles of the thighs, wasted and powerless, the feet