The seven fatal cases of eclampsia, which I have recorded, were thus treated :

1. Date 1854. Convulsions in seventh month. No sign of labour. Bleeding to twenty ounces, six leeches, cold to head, purgatives, sinapisms, etc. Died undelivered.

2. 1863. Convulsions in seventh month. Bleeding to fourteen ounces, purgatives, cold to head, chloroform. Fits ceased, but she died soon after giving birth to a dead child.

3. 1868. Convulsions at commencement of labour. Seven leeches, chloroform, cold to head, purgatives, etc. Delivery terminated speedily after dilatation with Barnes's bags. No more fits; but she died on the third day, from total suppression of urine.

4. 1868. Convulsions at full term. Bleeding to fifteen ounces, purgatives, cold to head, etc. Gave birth naturally to a dead child; no more fits; but she died comatose the following night.

5. 1869. Convulsions in eighth month; no sign of labour. Bleeding to fourteen ounces, purgatives, cold to head and blisters. Twenty-six fits before bleeding, and none after. However, she gradually sank, and died undelivered on the next day.

6. 1872. Convulsions in eighth month; no sign of labour. Bleeding to eighteen ounces, purgatives, cold to head, delivery by turning, chloroform. Fits still continued, abating gradually; she died suddenly at the end of three weeks.

7. 1874. Convulsions in ninth month; no sign of labour. Cold to head, purgatives, chloral in two doses of thirty grains. No fit for an hour after last dose; os too rigid to turn; delivery by craniotomy; convulsions returned two hours afterwards, and she died.

In this last, which was the worst case of all, bleeding was not resorted to, because the pulse was feeble from the commencement. From my own experience, I am inclined to consider bleeding and anaesthesia as the two important remedies, I can scarcely say which is the most important; whilst delivery is very little inferior to them, its inferiority being chiefly due to the circumstance that it is not so universally applicable. I have, on previous occasions, given cases which undoubtedly show that bleeding is very speedily followed by a great diminution in the amount of albumen contained in the urine. To this cause I believe that it owes its great power as a remedy.

The last subject I shall indicate to which statistical investigation may be most advantageously applied, is the etiology of what is commonly called puerperal fever. This is very extensive, and has been so fully discussed lately, that I need not enter upon it at any length. It has been abundantly proved that the same train of symptoms may be produced in a pregnant woman by the absorption of a variety of animal poisons; these symptoms, in general, are rigors on the second or third day after delivery, followed by headache, fever, great rapidity of pulse, and elevation of temperature, suppression of the milk and lochia, and generally local tenderness and pain in the uterine region, spreading over the whole of the abdomen, and accompanied with much tympanitic distension. In order to demonstrate what are the peculiar poisons which most frequently give rise to this train of symptoms, so that we may more effectually guard against them, we need a great number of independent observations, especially from men engaged in country practice who are able to isolate their cases. The poison which contaminates the blood of a woman lately delivered may be generated within herself, or, as no doubt more frequently happens, be introduced from without in various ways. Scarlatina, as Dr. Braxton Hicks has shown, is the poison which is most frequently introduced from without, and next to this perhaps erysipelas. When scarlatinal poison has been absorbed, I have observed, in several instances, the rash and sore throat characteristic of this disease. But more frequently, I think, these are absent, and only the ordinary symptoms of puerperal fever are recognisable. The same may be said of erysipelas. As an example of the first, I may mention a case which came to my own knowledge lately. A medical man, whose children were ill from scarlatina, was sent for on a Saturday to attend a lady in her confinement. On the Tuesday following, she developed symptoms of puerperal fever, such as I have mentioned above, and on the next Friday the husband, who fetched the medical man, was attacked with scarlet fever in its usual form. Now, there can be no doubt, I think, that though these two diseases were different in symptoms, they were derived from the same source. The poison of erysipelas may thus be modified in a similar manner. My friend Mr. Waugh of Midsomer Norton, Somersetshire, gave me the particulars of some cases which lately came under his notice, and which I hope he will shortly publish. A midwife, who had been nursing a case of erysipelas, attended a poor woman in her confinement. This woman was attacked with puerperal fever, which ended fatally in a few days. A woman, who had been washing some linen soiled with the discharges of this patient, was attacked with severe phlegmonous erysipelas of the arm and shoulder. Thus it appears that a poison of

a specific kind may give rise, in a woman lately confined, to a peculiar train of symptoms which go by the name of puerperal fever, and yet this woman may communicate the original disease, whether it be erysipelas or scarlatina, to another person. We need a number of very careful observations to show what differences are occasioned in the symptoms produced by scarlatinal poisoning in women who have had scarlatina previously and in those who have not. There is every reason to believe that women who have had scarlatina before, may, if recently confined, be reinfected and have the symptoms of puerperal fever, in the same way that other persons, who have had scarlet fever before, sometimes get a troublesome sore throat, after nursing scarlatina patients. The name puerperal fever is generally applied to severe cases; but there is no doubt that when this disease is very prevalent slight cases of septicæmia often occur, just as cases of diarrhoea are frequent when cholera is prevailing; but these are not considered to be cases of puerperal fever. I believe that many cases of puerperal mania are, in reality, the result of blood-poisoning; for I have frequently noticed, before the attack of mania, the occurrence of rigors, some fever, hysterical excitement, sallowness of skin, and especially loss of sleep. Phlegmasia dolens is generally ushered in by symptoms of this kind, and I have often observed them before the outset of mammary inflammation and abscess. I regret very much that, although I have seen at different times a great many cases of puerperal fever, my notes of these cases are so incomplete that I can bring forward no statistics of any value. Nearly all the cases I have seen have been very severe ones, to which I was called in a day or two before the fatal termination; and I have no complete notes of them in the earlier stages. I trust, however, that before long such deficiencies will be supplied by others, who have had opportunities of watching these cases from the commencement, and who have been so unfortunate as to have two or three consecutively. Such information is very difficult to obtain; two or three cases of this kind make such a stir in a quiet country village, and are so injurious to the medical man in attendance on them, that he is glad to have the matter hushed up in every possible way; and to request him to publish the cases is very like asking a witness to criminate himself. All the more honour, then, is due to those practitioners, who for the benefit of medical science and for the public good, nobly come forward, undeterred by any fear of risking their reputation, and publish a candid statement of their experience.

HYDATID DISEASE:

AS ILLUSTRATED BY SPECIMENS CONTAINED IN THE PATHOLOGICAL MUSEUMS OF THE METROPOLIS AND IN OTHERS ELSEWHERE.

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III.

QUITE recently, I had an opportunity of inspecting the collection at St. Thomas's Hospital, which I found to be particularly rich in entozoa of various kinds, especially tapeworms and hydatids. I encountered 76 preparations of internal parasites; and, of these, 42 were of the hydatid kind, representing at least 33 different cases. I say "at least," because it is often impossible to decide in instances where no history of the specimens can be obtained. Thus, there are three similar preparations of hydatids passed by the urethra; and, from their appearance, I judge them to have come from one and the same patient; yet there is no statement in the catalogue to that effect.

Of the 33 cases of hydatids represented in the museum, I reckoned 18 as referable to the liver, 2 to the brain, 2 to the bones, 2 to the urinary organs, and 1 to the lung, spleen, uterus, and soft parts of the thigh respectively. There are also 3 that may be classed as peritoneal. There is another choice example in which the disease cannot be referred to any particular organ. I allude to Dr. Peacock's case already published (*Pathological Transactions*, vol. xv), where the lungs, liver, heart, spleen, and some other organs were all occupied by hydatid formations. As an instance of extensive visceral infection by echinococci in the human subject, I believe this case to be unique. The brain-hydatids are particularly fine. In the specimen presented by Mr. Boot of Lincoln, the hydatid, two inches in diameter, is lodged in the anterior horn of the left ventricle. One of the peritoneal cases is remarkable for the amount of forward displacement of the pelvic viscera, caused by four or more hydatids, each of them nearly as large as a cricket-ball. Amongst these abdominal cases, I have also included a recent preparation, to which Mr. Stewart called my attention. The hydatid in question, of the size of a large lemon, existed near the fundus of the

bladder; its walls being one-third of an inch in thickness, and forming an unusually firm tumour. Of all the five specimens of hydatids in the collection, however, none have struck me so much as those affecting the bones. There is a humerus, taken from a man thirty-four years of age, in which the shaft is occupied throughout by small hydatids that have destroyed almost all the cancellous structure; in some places also, the absorption of the cortical layer has gone on to such an extent as to have left little more than the periosteum. Of course, the bone was at last fractured easily. It is a beautiful specimen; and the existence of echinococcus-heads was proved by microscopic evidence. Scarcely less interesting are two preparations illustrative of Mr. Travers' case of a man, thirty-eight years of age, in whom numerous small hydatids occupied both the head of the tibia and the lower end of the femur. Each set of parasites freely communicated with the knee-joint, necessitating amputation of the limb.

The very large museum connected with Guy's Hospital is rich in hydatids. When, some time ago, I spent several days in going over the collection, I examined 76 preparations, representing apparently 70 separate cases of this affection. Amongst the noteworthy specimens, one lung-hydatid was intimately associated with a thoracic aneurism, two others being connected with the pleura; and, of seven abdominal cases, five were connected with the peritoneum, one with the mesocolon, and one with the aorta. This last mentioned instance occurred in a woman of sixty years who, until her death, was treated for dropsy. She complained of incessant pain, which was only relieved when she rested on her hands and knees. Of the three cases affecting the heart, one has been published (Mr. Henderson's), where the patient, a girl of nineteen years, died suddenly whilst in the apparent enjoyment of perfect health. In one of the other two cases (Mr. May's of Tottenham), the left lung was also involved. One case of hydatid disease affecting the spinal column appears to have been originally an ordinary liver case. In Mr. Cock's example of genuine mammary hydatids, the hooklets and echinococcus-heads were detected; but I am not sure that this result of microscopic examination was obtained in the equally interesting example of hydatids of the thyroid gland (also removed by Mr. Cock). There are five bladder-cases, all apparently genuine (of which one has been published); and there are also five other cases referred in the catalogue to the kidneys, of which I regard two as doubtfully parasitic in character. Of three cases of hydatid growths occupying the soft parts of the thigh, two were under Mr. Bryant's care. The museum likewise contains an old preparation of hydatids of the tibia, but its history has been lost. There are also two brain-cases, besides upwards of a score of more or less characteristic and instructive cases of hydatids affecting the liver.

Scattered amongst the museums connected with the larger provincial schools and recognised hospitals, there must be a great many valuable preparations of hydatid disease; at all events, I judge so from the inspection I have incidentally made of a few of the collections.

Of eleven preparations of human hydatids which I observed in the Cambridge Anatomical Museum, apparently representing the same number of cases, seven were connected with the liver and one with the lungs. Those hydatids displayed in the "special series" of entozoa were of uncertain seat. From the recently published and valuable "notes" by Dr. Bradbury, I have no doubt that considerable additions have been made to the Cambridge collection since my last visit.

The museum at Oxford contains some choice specimens of hydatids, but I have only personally inspected a few of them. In the absence of original notes, however, I am indebted to the kindness of Mr. W. Hatchett Jackson for supplying me with several interesting particulars. The anatomical department of the Oxford collection shows from one particular case two hydatids that were found "under the dura mater". In the pathological department, we find one hydatid from the liver of a male subject, and also a preparation showing a number of small hydatids that were "coughed up from the lungs of a female". There are also in this department (Dr. Acland's) two examples of hydatids from the diaphragm, apparently belonging to two separate cases. One is described as a large "hydatid in the diaphragm covered by the pleura"; whilst the other is spoken of as "springing from the diaphragm and projecting into the sac of the pericardium". There is likewise a preparation showing a number of small specimens of hydatids that were passed *per anum* by a female. It is conjectured that they came from the liver.

The small pathological museum attached to the Brighton and Sussex Hospital is particularly rich in hydatids. Amongst others, it contains preparations illustrative of the remarkable case of hydatids in the region of the prostate, communicated by Mr. Lowdell in the *Lancet* in 1846.

The comparatively large museum adjoining the Norfolk and Norwich Hospital displays a choice series of hydatids, chiefly from the collection

of the late Mr. Crosse. That eminent surgeon prepared a special set of specimens to illustrate the process of natural cure by calcareous degeneration; and I may here, perhaps, be pardoned for mentioning that it was the study of these and other entozoa in Mr. Crosse's collection, some thirty or more years ago, that first drew my attention to the phenomena of parasitic life. Illustrations of the helminths in question are still in my possession. In one case (which is instructive as indicating the possibility of death from the simplest form and commonest habitat of an hydatid), a lad, twelve years old, received a slight blow from a playmate. Something gave way, and death speedily followed. It was found by *post mortem* examination that a solitary liver-hydatid, rather larger than a cricket-ball, had been ruptured. Almost unique as the case undoubtedly is, it is nevertheless by no means pleasant to reflect upon the fact that under similar circumstances a friendly "poke in the ribs" might prove fatal to any one of us.

POST PARTUM HÆMORRHAGE TREATED WITH- OUT, AND UTERINE HÆMORRHAGE TREATED WITH, IRON: RESULTS SUCCESSFUL.

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I AM induced by the invitation of Mr. Boddy to record briefly, and from memory, my experience of uterine hæmorrhage. When assistant to a gentleman in the North of England, about two years ago, I was called to the bedside of a young unmarried woman four miles in the country, and found, on my arrival, the head low in the pelvis, with good pains at regular intervals. It was just midnight, and I anticipated a comparatively short stay, though I always made it a point to remain an hour with a patient after delivery. The pains ceased in their frequency after my arrival, which I attributed to timidity of the patient under her rather trying circumstances; and I was contemplating the use of the long forceps (Barnes's), when a good pain expelled the head; and soon afterwards a plump healthy male child, of more than average size, was born. The placenta was somewhat tedious in coming away, and a little pressure was exercised on the abdomen, and the cord very gently drawn. It soon yielded; and I observed that it was of more than ordinary size, soft and pulpy. I could not now distinguish the uterus from the outside, but conjectured that it had followed the placenta, and was contracted deep in the pelvis, when, to my horror, an instantaneous gush of blood, that inundated the bed and streamed on the floor, took place. The woman turned ghastly pale; closed her eyes, groaned, was pulseless at the wrist, and to all appearances dead. I called for a basin of cold water and a towel, which I instantly saturated and applied over the womb; and forthwith insinuated my left hand (the patient, fortunately, was delivered on her right side) into the vagina, and thence into the uterus. I then found this organ to be as flaccid as an empty bladder, and so extensively dilated on all hands, that my elbow reached the vulva before my fingers impinged on the fundus uteri, and were distinctly traceable through the abdominal parietes by the outside hand. But the cold shocks to the belly, and irritation within, failed to produce contraction; and in a few minutes I withdrew my hand, and was more horrified to see another gush of blood. I instantly reinserted my hand and arm, and there retained them, as a source of irritation and an effectual plug, until the uterus was stimulated to contract by large imbibitions of rum, the only stimulant in the house. As soon as contraction was well begun, I gradually withdrew my left hand, and followed the uterus into the pelvis by the right or abdominal hand, and kept up pressure with the latter for fully two hours. I then applied a thick book, enveloped in flannel, as a pad; and, having bandaged the patient firmly, sustained pressure over the uterine site for nearly two hours longer. In the meantime, the patient, who had had a whole bottle of rum, vomited, opened her eyes, said feebly that she was "better", and gradually assumed a less ghastly colour. I may add that, the moment the first gush of hæmorrhage took place, I pulled away all the pillows, pounded the bedding, and thus left the patient's head considerably lower than her chest. I concluded that the heart, thus relieved, kept up a very feeble action, that fed the brain and sustained weak respiration, though to outward observation she was pulseless, motionless, and dead. I attributed the uterine contraction more to reflex stimulation and sympathy with the stomach on the introduction of the rum, than the improbable effects of absorption; and my hand and arm *in utero* acted as an effectual plug. The patient swallowed the rum automatically. This encounter with death lasted in all about four hours; and, as soon as vomiting ceased, I gave a twenty-five minim dose of tincture of ergot, and left the