the whole was soft and sodden with moisture, the cuticle was still adherent to the parts beneath, and those in their deepest levels seemed spongy and netlike, and the detached lower border had a ragged appearance from its outline being broken by shreds of blood-stained tissue of varying sizes and lengths. In the other gangrenous patches no natural separation of the sloughs had taken place, but pieces of black tissue cut away from the centres of two of the patches were one-eighth of an inch or more in thickness, and appeared to the naked eye similar in structure to the large slough above described. The blood-stained appearance of the lower levels of the sloughs would give rise to the suspicion that there had been hæmorrhage into the swellings before they became gangrenous, but there was nothing outwardly in the colour of these to support such a view, and the fluid contained in them was clear, and only very faintly coloured. No attempt at scabbing was visible in any of the gangrenous areas, although five at least were either exposed to the air, or covered by dry dressings, and the black patch in the centre of each was finally as large as a sixpence. A purple-red zone, fading to pink at its edge, was visible around each black centre, except in the large ulcer, where separation of the slough had taken place, and in all but this the gangrene was still extending up to the time of the patient's death. As far as one could tell in such small areas, the spread of the gangrene peripherally was preceded by a softening of the purple-red zone, apparently by undermining of its deeper tissues by fluid.

Appearance of disease on January 18th.

On January 18th the temperature was 102° F.; the slight bronchitic signs had not increased, and there was still no evidence of bronchopneumonia, the whole aspect of the patient being that of one dying from septic intoxication. The odour from the gangrenous areas, in spite of the very free use of antiseptics, was most disagreeable. The child died on January 19th. I was unable to obtain permission from the parents either to excise one of the patches from the scalp, or to make a *post-mortem* examination.

REMARKS.

The following points are perhaps the most noteworthy in the case just described. First, varicella did not precede the onset of the gangrene, even remotely, as has been observed in the majority of cases of gangrenous dermatitis occurring in infants and young children, of which I had the opportunity of seeing a very rapidly fatal instance, through the kindness of Dr. Meredith Richards, at the Birmingham City Hospital, about eighteen months ago.

Secondly, the child had been vaccinated when under three months of age, and was just two years old when attacked with the gangrene, so that vaccinia obviously cannot have had a causal relation to it.

Thirdly, the limitation of the gangrenous areas to the scalp is an uncommon feature in cases not following either varicella or vaccinia, the lower half of the body being more frequently attacked.

Fourthly, no formation of any scab was visible on any of the gangrenous patches, although these were, in the earlier lesions, of considerable size, and in two instances had existed for three weeks, the necrosed skin remaining moist throughout, and this fact is all the more noteworthy as in the large majority of these cases of gangrenous dermatitis a scab resulting from the drying of the central portion of the gan-

grenous area is formed under which ulceration still goes on in rupia-like fashion. It may be, however, that this scabbing was only prevented by an unusual amount of moisture keeping the dead skin continually saturated, and the more usual appearances of such lesions were absent from that circumstance alone.

The mode of origin in my case was more like that seen in the formation of the multiple subcutaneous abscesses not infrequently met with in ill-nourished children, in which the cutis over the abscess appears at first to be very little affected whilst the disease progresses in the subcutaneous fat, and the surface of the skin over quite large areas may look pale, or at the most show only a little desquamation and slight reddening. When this process had gone on for a certain time, and a slightly raised swelling covering an area as large as a sixpence or shilling had been produced, a deepening in colour, slow in the earlier but rapid in the later lesions, took place, and the subsequent rapidity in the development of the gangrene in the latter seemed due to an increased virulence of the disease, and not to any accidental concomitant like hæmorrhage into their cavities, which has been noted by Dr. Crocker¹ in a few rapidly fatal cases. The large conical ulcer conformed exactly to the characteristic appearances described in most cases of gangrenous dermatitis in infants, and, as is usually the case, the spread of the gangrene stopped when the slough had become separated. The swelling and subsequent breaking down of the adjacent lymphatic gland in the neck into pus is also interesting, and I am not aware that this adenitis in the neighbouring glands has been observed in these cases before. In the absence of any material from the scalp for pathological examination one can unfortunately only surmise as to where the disease started in this particular case. The appearances were, however, all in favour of the primary focus of the mischief lying either very deeply in the skin or beneath it, as it is otherwise difficult to see why no formation of pustules or vesicles took place, and why the cutis over moderately large areas remained comparatively unaffected for so long.

Finally, the patient showed no signs of ordinary pyæmia, nor of ulcerative endocarditis; there were no rigors, the joints were not swollen, the skin remained dry, and the temperature was never higher than 102.4° F. It would also be difficult to imagine multiple emboli from these causes producing eight distinct lesions of the scalp without the rest of the skin of the body showing any signs of similar embolic infection.

REFERENCE.

¹ *Diseases of the Skin*, p. 277.

ANTISTREPTOCOCCIC SERUM IN THE TREATMENT OF PUERPERAL FEVER.

By J. F. L. WHITTINGDALE, M.B.,
Sherborne.

I am led to report the following cases, because they show, I think, the value of the serum treatment in a case of puerperal septicæmia, and at the same time its harmlessness when used in a case which subsequently proved to be scarlet fever.

CASE 1.—Mrs. L., aged 27, primipara, was delivered on February 16th by my assistant with forceps, on account of rigidity of the perineum, which was rather badly torn and required sutures. A vaginal douche of Condy was ordered to be given thrice daily. On February 18th, within forty-eight hours of delivery, slight rigors occurred. On February 19th the temperature was 102.4° , and the pulse 100. Lochia scanty, noises in the ears, constipation, some tympanites, but no abdominal tenderness. Calomel gr. v was given, and followed the next morning by ol. ricini ʒj, which produced a copious evacuation of the bowels. On the evening of February 20th the temperature had reached 103° , and became even higher in the night, and was accompanied by delirium. On the morning of February 21st, when I first saw her, the temperature was 102.4° , and the pulse 120. The lochia were scanty, the wound gaping and covered with a thin grey discharge, the stitches having given way. She had had no sleep since delivery. In the evening the temperature was 103° , when I injected 10 c.cm. of Bullock's antistreptococcic serum into the right buttock (the serum having been prepared on February 14th). A draught of bromidia was given at bedtime, and the wound ordered to be kept stuffed with iodoform gauze. The temperature two hours after the injection was 102.8° . On the 22nd the morning temperature was 101° , pulse 108. Skin perspiring profusely. Had a better night. Rather constipated; considerable tympanites present. Had no more serum, so gave a quinine and hydrobromic acid mixture. The evening temperature was 102° . On the 23rd temperature was 100.4° , pulse 96 in the morning. Abdomen still tympanitic; perspiration profuse, no headache, moderate amount of

milk, lochia more copious. I injected 10 c.cm. antistreptococcic serum prepared on February 19th. The next day the temperature became normal, the wound took on a healthy action, and all the serious symptoms disappeared. For several days, however, the skin continued to perspire profusely, the result apparently of the serum injections.

CASE II.—Mrs. S., 2-para, delivered February 15th. Breech presentation. Twelve hours after delivery she had a severe rigor, and diarrhoea accompanied by violent sickness set in. On the 17th the morning temperature was 105°, pulse 150, diarrhoea and sickness still continuing; lochia scanty, uterus tender. Fearing that some of the placenta might be retained, as I was not present at the delivery, I dilated up the uterus and removed a small portion of placenta, but not sufficient to account for the serious symptoms. I then gave a uterine douche of biniodide of mercury 1:2,000. The evening temperature was 102.8°, skin dry, tongue parched; ordered Warburg's tincture, but she could not retain it. On the 18th, morning temperature 102.4°; had a fair night; lochia more profuse, abdomen slightly tympanitic. I injected 10 c.cm. antistreptococcic serum. Evening temperature 103.2°; lochia more scanty, face very flushed, a very little milk in the breasts. Ordered quin. sulph. gr. v. and cold sponging to be resorted to if fever rises. On the 19th, morning temperature 102.8°; slight scarlet rash on buttocks; breasts fuller; diarrhoea slight; lochia scanty, but good colour and not offensive. Injected 10 c.cm. of serum. Evening temperature 104°. Had a bad day. Perspires freely, has slight rigors, scarlet fever rash present over abdomen and thighs, accompanied by soreness of throat and commencing desquamation of tongue. She was very feverish and delirious during the night, and required frequent sponging, but on the morning of the 20th the temperature had fallen to 100.8°, and she expressed herself as feeling much better. The fever gradually subsided without more serious symptoms occurring, and at the present time (March 2nd) she is desquamating freely.

My reason for detailing the case of Mrs. S. is because it is well nigh impossible in the early stages to distinguish between septic and other causes of fever during the puerperium, and that if we wait until they declare themselves, valuable time may be lost, and, as this case shows, no harm is done by treating the case at once as a septic one.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

WALCHER'S POSITION IN LABOUR.

I HAVE had a case recently in which I used with great advantage Walcher's position in parturition, the use of which was advocated at the Carlisle meeting last August, and in the BRITISH MEDICAL JOURNAL of October 31st, 1896. The details were as follows:—

Mrs. P. had menstruated regularly and without pain since the age of 15, and had been married two years. At her first confinement on December 28th, 1895, she was delivered with forceps, after great difficulty, of a child, which was dead when born.

On January 11th, 1897, she was at full term. Pains began in the night and the waters broke at noon the following day. During the afternoon and evening of January 12th she had severe pains. Early the next morning the midwife, who was in charge, sent for me, and I thus first saw the patient at 6 A.M. on January 13th. I found dilatation complete, the head presenting in the L.O.A. position but arrested above the brim of the pelvis. I at once gave chloroform and applied Professor A. R. Simpson's axis traction forceps in the left lateral position, and made three separate and prolonged attempts to pull the head past the brim, using much more force than I ordinarily find necessary for that purpose.

I then decided to try Walcher's position. Having put the patient in the lithotomy posture, with the buttocks well over the edge of the bed, I allowed the legs to hang down. The feet then rested on the floor. I therefore raised the pelvis by placing two pillows under the buttocks, and then found that the feet swung clear of the floor, so that the whole weight of the legs pulled the pelvis down and away from the sacrum. I then applied traction, and, though I was using less force than before, the head began to enter the pelvis, and passed the brim almost suddenly. Delivery was completed deliberately, and without further difficulty. After artificial respiration, the child breathed freely, and has developed no head symptoms, though the right frontal bone was bulged to an extent that suggested fracture.

The following measurements indicate the degree of disproportion between the head and the brim:—The circumferences of the child's head were—occipito-mental, 15½ inches; occipito-frontal, 14¼ inches; sub-occipito-bregmatic, 13½

inches. The diameters of the pelvis were—interspinous, 10 inches; intercrystal, 11 inches; external conjugate, 7½ inches; diagonal conjugate, 4½ inches; estimated true conjugate, 3½ inches. The pelvis was generally contracted with a somewhat projecting promontory. In this case the advantages of Walcher's position were very great, as but for it I am sure the life of the child could not have been saved without symphysiotomy, which, like craniotomy, would have exposed the mother to grave risk, exhausted as she was by prolonged labour.

Manchester.

G. H. MITCHELL, M.B.

ON EFFUSION INTO THE KNEE-JOINT.

THE following simple manner of ascertaining the presence of a very small quantity of fluid in the knee-joint I have not seen previously described:

The knee-joint being slightly flexed, and laid on its outer side with the inner side in a good light, on making pressure with the hand above the patella, the skin on the inner side of the patella will be seen to rise. In this way a small quantity of fluid which will not give a sense of fluctuation to the hands may be clearly demonstrated.

C. DUER, Surg.-Capt. I.M.S., M.B., F.R.C.S.,

Rangoon.

Junior Civil Surgeon.

RUPTURE OF GENITAL CANAL: PROLAPSE OF INTESTINES: EXHAUSTION: DEATH.

AT 6 A.M. on May 11th I was called to attend the wife of a Boer farmer. The woman was 40 years of age. At her two preceding labours she had been delivered of dead children. In the present instance she had been in labour for thirty-six hours, and three hours before my arrival had been delivered of a normal living child. For a short time preceding the birth of the child the pains appeared to have been of a most acute character, and to have caused intense suffering. The delivery of the child was attended and followed by profuse hæmorrhage. After the delivery of the child the pains ceased entirely, but the hæmorrhage continued. On examination, I found that the patient was a well-built and well-nourished woman of middle age. The abdominal walls were exceedingly lax. The condition of the patient was one of marked collapse—pulse lost, pupils dilated, and surface cold and clammy.

The uterus (contracted) could be felt high up in the abdomen. The pelvis was roomy, and the canal was found to be full of large blood clots. On clearing out these, and introducing nearly the whole of the hand, the os could be felt, and the uterus was found to be tightly contracted upon the contained placenta, the funis having been apparently torn away by the midwife in attendance in her efforts to deliver the placenta.

Lying in the lower part of the vagina and posteriorly were several loops of small intestine, on one of which was a laceration of about an inch in length, and penetrating deeply into the wall of the gut. The prolapsed intestine was deeply congested. The rupture was then found to be one of extensive dimensions, passing transversely across at about the level of the junction of the cervix with the vagina posteriorly. The upper edge of the rupture could be distinctly traced.

Death occurred from exhaustion about three-quarters of an hour after my arrival. I could obtain no information regarding the presentation, and the cause of the protracted labour does not, therefore, seem apparent.

Transvaal.

DAVID HORWICH, M.R.C.S., L.R.C.P.Lond.

LANDRY'S PARALYSIS.

AS I believe the following to be a case of the above disease, which is exceedingly rare in the British Islands, details may interest your readers.

Mrs. G., aged 55, with five children, the youngest about 10, suddenly developed epilepsy two years ago, without any cause, and became hopelessly demented. The family history was good; there was no neurotic tendency. The menses ceased six years ago, she had always been a temperate, hard working woman.

In January, 1897, she had an attack of fever (influenza?) and since then has "run down in health." She came under my care on May 10th. She was a very stout woman, the skin was harsh and dry, the tongue clean, the pulse weak but