

soft; it was perhaps somewhat atrophied and its layers perhaps blended. Scattered through the white matter at this level were numerous, somewhat soft, slightly yellow nodules with ill-defined outlines, mostly about the size of a pin's head, though some were somewhat larger, others smaller. There was a large area of old softening in the left hemisphere; it involved the white matter only of the occipital lobe and the posterior half of the parietal lobe. It was situated above the level of the ventricle, the roof of the posterior horn of which formed its floor. The surrounding grey cortex was practically intact, the softened white matter, however, extending almost close up to it. The softened tissue had a gelatinous appearance and was of a bright yellowish-brown colour. In the centre there was an irregular cavity containing fluid. There was a similar softening containing fluid in the external capsule on the right side. Scattered throughout the brain there were some small rounded deep red points which were probably miliary aneurysms. In the right hemisphere, in the corresponding position to the large softening described above, there was a diffuse area of softened tissue which, however, presented the normal colour. There was also much general softening of the ventricular walls, especially posteriorly. In the grey cortex of the right hemisphere in the parietal and occipital lobes some small areas of atrophic softening were found. The lateral ventricles were much dilated; the internal lining membrane of the ventricles was not thickened, and there were no granulations. In the white matter of the right lobe of the cerebellum there was a softening, similar to that in the external capsule, about the size of a hazel nut. In the convolutions of the left lobe on its superior aspect there was an area about the size of a horse bean, which, while preserving the normal markings, was firmer and darker than the surrounding tissue. On cutting across the pituitary body fluid spouted out of the ventricles. The medulla oblongata appeared to be normal."

Corrigendum.—Case 2, page 868, eighteenth line from the foot, instead of "was an example of cortical," read "was an example of subcortical."

(To be continued.)

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

DIPHTHERIA OF THE UMBILICUS.

BY BERNARD PITTS, F.R.C.S. ENG.,

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ON Feb. 20th a child, aged fourteen days, was admitted into the Hospital for Sick Children, Great Ormond-street, under my care for inflammation of the umbilicus. The cord had separated on the eighth day and the resulting wound had continued to discharge extremely offensive pus. When seen on the 20th there was a brawny-red indurated area round the umbilicus of about the size of a five-shilling piece, from which the epidermis had peeled. The umbilicus itself was the seat of a dirty coloured wash-leather slough, discharging extremely offensive pus from an opening into which a probe could be passed for about an inch. The child's condition was otherwise good, the only other point of interest being an occasional inspiratory crow and with this some slight cyanosis. No definite history was obtained till the next day, when it was ascertained that a brother of the patient had been removed to a fever hospital for diphtheria during the previous week and had died on the same morning as that on which the history was taken (Feb. 21st), and that the mother was then an inmate of University College Hospital, where, on inquiry, it was found that she was suffering from diphtheria. A culture was then made of the pus escaping from the umbilicus and examined on the 22nd, when the bacillus of diphtheria was isolated. In the meanwhile the child, who had suffered from several attacks of vomiting, had become considerably weaker and died on the evening of the 22nd. After death nothing

abnormal was found in the larynx or pharynx, nor was the condition at the umbilicus found to extend to any of the deeper structures.

Harley-street, W.

EXTENSIVE SUBCUTANEOUS EMPHYSEMA COMPLICATING DIPHTHERIA.

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WE report the following case believing it to be both rare and interesting.

A boy, aged six years, was on Feb. 17th, 1897, taken ill with a sore throat and slight difficulty in breathing. The following day he had an attack of epistaxis, and on examining the throat the tonsils were observed to be the seat of patches of exudation. There was a slight rise in temperature and pulse-rate, the dyspnoea being now characterised by noisy inspiration, the patient in general condition getting worse. The glands under the jaw were slightly enlarged, and the urine contained a considerable amount of albumin. Some of the exudation obtained from the tonsils was sent to the School of Preventive Medicine for bacteriological examination and the diphtheria bacillus was isolated. On Feb. 22nd subcutaneous emphysema appeared at the root of the neck, giving rise to the characteristic fine crackling feeling, and forming tumours above the sternal end of each clavicle. During the next day the emphysema spread upwards to the submaxillary regions and downwards over the chest, and in a few days air could be felt under the skin all over the trunk, but more marked on the right of the middle-line. The right half of the scrotum was much inflated with air and was quite transparent. Subsequently the emphysema reached as far as the zygomatic regions above, while below the affected area was limited by Poupart's ligaments and the scrotum in front and by the margins of the coccyx and sacrum and the iliac crests. The child's temperature rose to 100° F., the pulse to 144 per minute, the dyspnoea became more urgent, and there was moderate cyanosis of the face. Coughing occurred frequently with semi-purulent expectoration, and rhonchi were heard scattered throughout the lungs. Shortly before death the thermometer registered 101.6°, the pulse reached 180 per minute, and the urine contained one-third albumin. The treatment consisted mainly of stimulants, iron, antiseptics, and the use of the steam kettle and tent. The dyspnoea did not seem at any time sufficiently urgent to necessitate tracheotomy. A post-mortem examination limited to the neck was all that could be obtained, and this was just sufficient to eliminate the possibility of ulceration or perforation of the trachea as a cause of the emphysema. The trachea and larynx were found to be lined with false membrane.

Remarks.—We regret that owing to the difficulty in obtaining permission to perform a complete necropsy the cause of the emphysema could not be ascertained. Such a condition of almost universal emphysema complicating diphtheria is seldom met with, we think, though we are aware of a limited emphysema occurring in the neck after tracheotomy and in some cases of pulmonary disease where it has been traced to the rupture of an air vesicle. We think in this case the probability is that the emphysema occurred through the rupture of an air vesicle and the escape of air into the adjacent tissue of the mediastinum and thence to the neck and trunk.

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EXPERIMENTAL DISTORTION.

BY W. S. HEDLEY, M.D. EDIN., M.R.C.S. ENG.

THOSE who use the x ray paper or other flexible sensitised surface in radiography for surgical purposes must beware of producing artificial deformities. Shadows must be thrown upon a flat surface, not upon a curving one. The latter kind of distortion is easily realised by anyone who watches his own shadow lengthening and shortening as he walks across the "ridge and furrow." It is obvious that the sensitised