

Memoranda :

MEDICAL, SURGICAL, OBSTETRICAL.

CHICKEN-POX DURING INTRAUTERINE LIFE.

I HAVE been unable to find in the literature any account of a case resembling the following :

I was called to see an infant some four hours after delivery. The child was apparently healthy, except for the presence of a rash distributed generally, but more marked on the scalp, face, and trunk. The palms of the hands and soles of the feet were also affected, as was also the mucous membrane of the mouth. In character the eruption was identical with that which obtains on or about the fourth day in varicella, that is, macules, vesicles, vesicles with turbid fluid contents, pustules, ruptured pustules, and scabs, were all present, indicating that the eruption must have begun whilst the infant was still unborn. There were no further signs of disease, and the eruption disappeared in a few days without a further crop appearing.

The mother of the child was apparently unaffected with the disease, but in the same house there had been cases of chicken-pox fourteen days previously, disinfection of the room having taken place, however, in the interval between that time and the birth of the child. The history of the illness of the other children was as follows: About twenty-five days before the confinement one child was removed to the fever hospital with measles and broncho-pneumonia. Four days later a second child developed measles and chicken-pox, and a third followed with measles, and this last child developed chicken-pox in the fever hospital, incubation period having begun at home. In the interval between the removal of the last child and the birth of the infant—that is, fourteen days—no illness could be traced in the house, neither could any contact with infectious disease be discovered, except for the fact that the mother visited her children at the fever hospital.

Hirst, in his *Textbook of Obstetrics*, gives an account of various infectious diseases occurring in the fetus, and the following remarks are extracted in the main from that work. At first it was thought that the transmission of organisms into the placenta from the maternal blood was impossible, the ground for such belief lying in the results of experimental inoculation of animals with the tubercle bacillus, with the anthrax bacillus, and with pathogenic organisms. In the fetuses of animals injected with these micro-organisms, although the latter were found in the maternal blood in large numbers, none were ever discovered in that of the fetuses. Later, however, the observers responsible for the foregoing conclusions, as a result of further experiment, stated that micro-organisms and colouring matters, when injected into the maternal blood, could be discovered in that of the fetus. In a human fetus removed by Caesarean section from its mother, dead of septicaemia, numbers of micro-organisms were found in the blood.

Koubasoff¹ stated that he had always found anthrax bacilli in the blood of fetuses born of mothers infected with the disease except in one instance, where, in a twin birth, one fetus was macerated and its placenta the site of haemorrhages, the other being healthy and its placenta unaffected. In the blood of the former organisms were not isolated, whereas in that of the latter they were numerous; this seems to suggest that a pathological condition of the placenta is necessary to prevent the transmission of organisms, and is one which alone offers resistance to microbic invasion of the fetal blood.

The list of infectious diseases affecting the fetus *in utero* is lengthy. Variola is a well recognized entity. A child may be born covered with pustules or even scars, and the mother may or may not be affected with the disease. As a general rule, however, the fetus of a small-pox patient is born unaffected. The mother has in some cases been vaccinated during pregnancy in order to see if immunity may be produced in the fetus; a positive result occasionally obtains, but the reverse is the rule.

McDonald² has reported intrauterine measles, and scarlatina has been noted in many cases. Hirst quotes a case reported by Leale³ in which a child was born with a "strawberry" tongue and a red coloration of the skin,

¹ *Medical News*, August 30th, 1884.

² *Edin. Med. Journ.*, 1884-1885, p. 699.

³ *Medical News*, 1884, p. 636.

the latter remaining for seven days, and on the tenth day albuminuria and oedema appeared.

Other diseases are also reported in the new-born fetus. A child has been born with consolidation of its lungs, the mother herself being affected with pneumonia. The organisms of septicaemia, cholera, malaria, typhoid, and erysipelas are reported to have been found in the blood of the new-born fetus.

All these facts are interesting in the light of the above case, which was clinically a definite but mild attack of varicella, as evidenced both by the eruption and the history of illness in the house, together with a satisfactory incubation period, although disinfection had taken place. If, then, small-pox and other infectious diseases may and do occur in the fetus, their origin taking place *in utero*, there is no reason why, in virtue of this case, chicken-pox may not be added to the list.

I must express my indebtedness to Dr. J. Prescott Hedley for advice and permission to publish this case.

Darlington.

F. C. PRIDHAM, M.R.C.S., L.R.C.P.

Reports

MEDICAL AND SURGICAL PRACTICE IN HOSPITALS AND ASYLUMS.

WOLVERHAMPTON AND SOUTH STAFFORDSHIRE GENERAL HOSPITAL.

RUPTURED SPLEEN IN A BOY : SPLENECTOMY : RECOVERY.

(By HOWARD H. C. DENT, M.B., F.R.C.S., L.R.C.P.,
Honorary Surgeon to the Hospital.)

ON January 3rd, 1913, a boy, aged 14, was admitted under my care. He had been walking along a pit "way" without his light when he was run into by a tub coming towards him and thrown violently against a "prop." He felt a blow in his abdomen, suffered great pain internally, and vomited.

When I saw him he was blanched, very restless, and had great pain and distension of the abdomen. The urine contained blood, and he had bruises over his left shoulder and left ribs. The temperature was 97° F., the pulse was 108 and increasing in rate, and the respirations 28.

Internal haemorrhage was diagnosed, and the abdomen was opened in the middle line. It was found full of blood. The bleeding came from the splenic region. In order to gain more room a transverse incision was made across the left rectus. With considerable difficulty the spleen was pulled up for examination, and was then found badly crushed and lacerated posteriorly. I did not think it possible to suture the tears, and therefore decided that the safest course was to remove the organ. Clamps were put on the vessels close to the spleen and the latter cut away. The vessels were then tied with difficulty, owing to the depth, the shortness of the pedicle, and the difficulty of pulling the latter into the wound. It was also necessary to take care not to include any portion of the pancreas. After the ligatures had been tied there was still some small amount of oozing, and as the boy's condition demanded speed, the region was packed with gauze, the end of which was brought out at the lower angle of the transverse wound. During the operation 2 pints of saline solution were put into the median basilic vein.

The after-treatment consisted of continuous salines per rectum, pituitrin every four hours, and morphine hypodermically, as there was great restlessness. The morphine had to be used for four days. After the operation there was no further haematuria. During the next week the temperature ranged from 98.4° F. to 100.5° F., the pulse from 100 to 120, and the respirations from 30 to 40. The gauze was removed on the third day.

On January 12th—nine days after the operation—the temperature went up to 102° F., and kept at 101° for the next three or four days. The respirations varied from 40 to 46; the pulse was 120. Signs of fluid were found on the left side of the chest, the side that was bruised; 10 oz. of bile-stained fluid were withdrawn by aspiration, and the temperature, pulse, and respirations rapidly improved, and the signs of fluid disappeared. The boy

was allowed up on January 30th, and on February 15th was only waiting for an abdominal belt before discharge. He was very fit and well. He had been taking a mixture since February 1st containing liq. arsenicalis and ferri et ammon. cit. An examination of the blood at this stage by Dr. Rattray, the Resident Medical Officer of the hospital, gave the following result:

Haemoglobin	...	...	...	80%
Red corpuscles	...	...	...	5,066,000
White corpuscles	...	...	...	9,600
The latter consisted of:				
Polymorphs	...	...	...	22%
Large lymphocytes	...	...	...	13%
Small lymphocytes	...	...	...	64%
Eosinophiles	...	...	...	1%

The lymphocytes being mainly of transitional type—that is, with large numbers of basophile granules and kidney-shaped nucleus.

This boy came to my out-patients on March 3rd, 1913, feeling remarkably fit and well. A blood film was taken, and Dr. Gordon Ward, who kindly examined it for me, reports as follows:

“There is slight eosinophilia and marked lymphocytosis, as is commonly found after splenectomy.

“Slight changes in the red cells of little significance, and commonly found in children.

“Increase in the platelets of doubtful significance.”

Differential Leucocyte Count.

Polymorphs	...	...	41.2 %	} 48.0 %
Eosinophiles	...	...	3.8 %	
Mast cells	...	...	0.4 %	} 2.6 %
Transitional leucocytes	...	...	2.6 %	
Small mononuclears	...	...	51.0 %	} 52.0 %
Large mononuclears	...	...	1.0 %	
Anisocytosis	...	...	Increased.	

British Medical Association.

CLINICAL AND SCIENTIFIC PROCEEDINGS.

STAFFORDSHIRE BRANCH.

THE third general meeting of the session of the Branch was held at Wolverhampton on April 24th, when the chair was taken by the President, Mr. E. C. STACK, F.R.C.S.I.

Mr. E. DEANESLY showed the following patients:

(1) *Two Cases of Facio-hypoglossal Nerve Anastomosis for Facial Paralysis.*—The first, now a girl of 14, was admitted nine years ago with facial paralysis on one side and double mastoid suppuration. Radical mastoid operation was performed on the paralysed side, but two months later the facial paralysis was still complete. The facial nerve was therefore exposed as it emerged from the stylo-mastoid foramen and the hypoglossal nerve at the hypoglossal border. The latter was divided, turned back, and anastomosed with fine silk into a longitudinal slit in the undivided facial nerve. The second case, a girl of 16, underwent a similar operation two years ago on account of facial paralysis following a radical mastoid operation. In this case both nerves were divided, and the distal end of the facial nerve anastomosed directly to the central end of the hypoglossal. Both cases now showed identical results. In repose the face showed no difference in the two sides; there was no flaccidity on the affected side or overaction on the opposite side. A smile, however, at once showed a marked difference, the mouth being drawn strongly towards the unaffected side. On making a strong voluntary effort to frown and screw up the eyes, the brow muscles, the orbicularis, and the muscles of the angle of the mouth all contracted visibly, though less strongly than on the opposite side. Voluntary action of the affected muscles was, however, much stronger when associated with voluntary movement of the tongue, for when the latter was protruded and withdrawn the action of all the muscles on the affected side was almost equal to that on the sound side. The half of the tongue on the side of the anastomosis was completely paralysed and wasted. (2) *Two Cases of Paralysis of the Arm from Injury of the Brachial Plexus at Birth.*—The first, a child of 8 months, which was awaiting operation, showed the ordinary type of birth palsy described by Duchenne—namely, paralysis of the deltoid, spinati, biceps, brachialis

anticus, and supinators of the radius. The arm hung helplessly by the side without power to flex the elbow or perform any shoulder movements except adduction (pectoral muscles) and slight elevation of the scapula (serratus). The second case was in a similar condition on its admission to hospital seven years ago at the age of 10 months. The site of the nerve injury was indicated by a cicatricial ball at the junction of the fifth and sixth cervical nerves to form the highest primary cord of the brachial plexus. This node was excised and the divided ends of the cord reunited with fine silk. The affected muscles responded to faradic stimulation of the divided nerves. Recovery was now practically perfect, save for slightly less power of supination on the affected side. The arm could be raised above the head, and all the previously paralysed muscles could be seen to be plump and well nourished. (3) *Cancer of the Rectum.*—A man, aged 50, from whom a cancerous rectum had been removed by the abdominal route. He was now soundly healed, and had normal actions of the bowel through the anus. The operation performed was not the combined abdomino-perineal operation; the whole operation was carried out in the Trendelenburg position through a median hypogastric incision. The operation was not applicable to cases in which the anus was involved in the growth, or so near it as to necessitate sacrifice of the anus, but it was applicable to all cases not less than 2 in. above the anus. After mobilizing the sigmoid and dividing the superior haemorrhoidal artery, the rectum was detached from the sacrum behind and the bladder in front until it could be cut off well below the growth and immediately above the anus. The upper section was made at the lower end of the sigmoid flexure and the length of bowel removed measured 9 or 10 in. The end of the sigmoid was then passed through the anus from above and sutured to the cut edge of the remaining anal segment of bowel. The peritoneum was carefully closed over the pelvic floor and the wound closed. Performed in this way there was no haemorrhage and remarkably little shock.

The Nutrition of Elementary School Children.—Dr. W. SPENCER BADGER, in a paper on this subject, discussed the various methods of assessing nutrition, and pointed out that clinical examination afforded the only reliable means of estimating its value. The popular belief that the nutrition of slum children was good was controverted. Among the common characteristics of malnutrition were expressionless countenance, mental dullness, mouth breathing, blepharitis, loss of muscular tone, half-open eyes, blueness of the extremities, and a harsh dry skin. The frequency of bronchitis and nasal catarrh in school children was commented upon. One-fourth of a series of 700 scholars were reported to be subject to night sweats. Malnutrition had a close association with disease, sometimes preceding and sometimes following it. Heart disease, particularly, was a nutritional disorder in school children. Dental caries had a widespread influence in producing malnutrition, and insufficiency of sleep was one of the prime preventable causes. The harmful effect of overwork operated mainly by reason of the work outside school hours being undertaken by the least fit and worst fed children. Malnutrition was frequently associated with poverty, but in such cases the poverty was commonly found to be accompanied by thriftlessness, ignorance, dirt, or neglect. It was remarkable how little alteration the nutrition of the children of thrifty and sober parents underwent. In the face of such abundant evidence of neglect as existed in the elementary schools it was regrettable that national philanthropy consisted so exclusively in giving assistance. While there were various agencies for the relief of destitution, there was a conspicuous disinclination to apply the proper remedies for the prevention of neglect. Drs. LILA GREIG, LOWE, GALBRAITH, and Mr. STACK discussed the paper, and Dr. BADGER replied.

Thrombosis and Embolism after Pelvic Operations.—Dr. FREDERICK EDGE suggested the prophylactic fixation of the thrombus by injections of antistreptococcal serum, the administration of horse serum, calcium lactate, and potassium iodide by the mouth. The volume of blood should be increased by copious saline solutions. Messrs. ALCOCK, DEANESLY, and STACK took part in the discussion which followed, and Dr. EDGE replied.

Intestinal Obstruction.—Mr. DEANESLY read a paper on this subject.