CONGENITAL MALFORMATION OF THE UMBILICUS.

By GEORGE HEATON, M.B.Oxon., F.R.C.S.,

Surgeon to the General Hospital, Birmingham; and to the Hospital for Sick Children.

THERE have lately been under my care three cases of malformation of the umbilicus which, owing to their comparative rarity and interest from a developmental point of view, have seemed to me to be worthy of record.

CASE I. Large Congenital Exomphalos: Hernia of Intestines into a Thin Membranous Sac. Composed of the Dilated Umbilical Cord: Abdominal Section: Recovery.—R. M. was admitted into the General Hospital on August 18th, 1892, four hours after birth, on account of a large membranous protrusion at the umbilicus. The infant, a female, was in other respects quite healthy and a full term child. Protruding from the umbilicus was a membranous sac about the size of a large orange, with thin transparent walls thickened on the right side, to which the umbilical cord was attached. Coils of intestine were plainly visible through the sac, which was evidently an expansion of the umbilical cord. The intestines could not be reduced into the abdominal cavity. Chloroform was administered, the sac opened, and the neck of the umbilical aperture enlarged by a vertical incision above and below the umbilicus. Several coils of small intestine—one coil with a thin white cord attaching it to the fundus of the sac—were reduced into the abdomen. The cæcum and vermiform appendix were intimately adherent to the sac wall. As it was impossible to separate these latter, all the sac was cut away except where adherent to cæcum, and this part was reduced into the abdomen along with the intestine. The abdomen was then closed with fine silk sutures.

During that night and the whole of the following day the child vomited at frequent intervals. The vomit resembled coffee grounds. In the evening of August 19th the anus was well dilated with forceps. This gave vent to a quantity of meconium, and the child's recovery was afterwards uninterrupted. When seen a few months ago she was a strong healthy girl.

This case is an example of a deformity occasionally met with in obstetric practice. The white cord attaching a coil of small intestine to the fundus of the sac was the fibrous remains of the vitello-intestinal duct. This and the adhesion of the cæcum to the sac wall may perhaps account for the non-closure of the umbilicus.

CASE II. Umbilical Fæcal Fistula due to Persistence of the Ductus Vitello-intestinalis Opening at the Umbilicus: Death: Necropsy.—J. Y., a puny male infant, was admitted into the Children's Hospital in October, 1894, with a large abnormal aperture at the umbilicus, through which all fæces were discharged. The history was that the infant was at birth a well-developed child. The midwife who attended the mother noticed nothing wrong with the navel, and ligatured the cord in "the usual way." Meconium and fæces passed naturally *per anum* for two days. On the fourth day some fæcal discharge was noticed at the umbilicus. This discharge from the umbilicus increased daily, while the motions passed through the natural passage rapidly grew smaller, until latterly all fæces had been discharged through the abnormal aperture.

The infant was extremely emaciated on admission. At the umbilicus was a fistula lined with mucous membrane, the edges of which were in a state of prolapse. A probe passed freely through the fistula but detected no "spur." The anus and rectum were well formed but empty. Attempts were made to induce a closure of the opening by means of an india-rubber ring, but had to be abandoned, as they produced obstinate vomiting. No motion was passed *per anum*; partially digested curds passed through the umbilical opening, and he died some ten days after admission.

At the necropsy, which was made on the following day, it was found that, situated about seven inches from the ileo-cæcal valve, was a short wide diverticulum leading from the small intestine to the umbilicus. The diverticulum had a thick muscular wall, and was lined by normal mucous membrane. The small intestine above the diverticulum was much

dilated; below it, both small and large intestine were much contracted. The cæcum and appendix cæci lay free in the cavity of the true pelvis, attached to the anterior surface of the sacrum by a long mesocæcum. The ascending colon passed upwards on the left side of the spine, and then crossed over to the normal situation of the hepatic flexure.

CASE III. Muscular Walled Sac Opening at Umbilicus and Attached to the Small Intestine; Due to Imperfect Obliteration of the Vitello-intestinal Duct.—W. B., a boy, aged 2½ years, was admitted into hospital in September, 1893, suffering from an umbilical discharge. The mother's account was that ever since birth there had been a periodic discharge of "urine from the navel." The discharge took place generally after an attack of straining or fit of crying.

On examining the navel a small fistula was discovered, into which a probe passed downwards and backwards for 3 inches. The introduction of the probe gave vent to several cubic centimetres of a clear, thin, oily, light yellow fluid, resembling urine except in its being oily to the touch. The fluid when collected was found to be slightly alkaline in reaction, highly albuminous, and contained no urea. After admission there were several discharges of this fluid. The child was anaesthetised, a probe passed into the fistulous opening, and an exploration made. The peritoneum was opened and the fistula found to lead into a muscular walled sac, attached to the umbilicus and passing downwards and backwards. It had no connection with the bladder, but was attached at its blind end by a short, slender, fibrous cord to a coil of small intestine. The sac was opened, its walls partly excised, and the remains of it stitched to the edges of the parietal peritoneum.

On October 22nd, as the remains of the sac were still discharging the same yellow oily fluid, it was again laid open. Its interior was found to be lined with mucous membrane resembling that of the small intestine. The wound rapidly granulated up, and the child left the hospital well. The fluid resembled in its reactions those ascribed to the succus entericus; and the wall of the sac resembled very closely that of the small intestine. Unfortunately no microscopic examination was made of the portion excised. From its connections, however, I have little doubt that it was developed from a portion of the vitello-intestinal duct, which had not undergone obliteration.

The three cases related above are all examples of malformations of the umbilicus due to errors in development in connection with the alimentary canal. Urinary and biliary fistulae at the umbilicus have been recorded by various writers, but of such I have had no personal experience.

NOTE OF A CASE OF SALIVARY CALCULUS PRESENTING UNUSUAL SYMPTOMS.

By A. MARMADUKE SHEILD, M.B., F.R.C.S.,

Assistant Surgeon and Lecturer on Practical Surgery, St. George's Hospital.

ON December 15th, 1894, I saw a gentleman, aged between 30 and 40, a patient of Dr. Day, who sent him to me on account of an affection of the mouth and neck. He was pale, and looked worn and ill, and stated that he had noticed a "hard lump" in the floor of the mouth for about two years, which had much increased of late, and become painful and inconvenient. The swelling in the submaxillary region had also gradually appeared, first as a small lump, then as a continually increasing and painful one. The significant statement was also made, that the lump in the neck became markedly more painful and harder after eating.

On examination, a hard elongated tumour occupied the floor of the mouth on the left side, beneath the tongue. The mucous membrane was livid, and at one spot was a fungating excrescence. Indeed, I looked upon the affection as one of typical epithelial carcinoma, which hardly needed a second glance. The mass in the neck and under the jaw was hard and fixed, the size and consistence of a small potato, indistinguishable from cancerous glandular disease. The history of the pain and swelling in the neck after eating, made me suspicious that the salivary duct was blocked, and that possibly by a calculus. The orifice of the duct was indistinguish-

able. I accordingly passed a fine needle into the swelling, and at a considerable depth plainly felt a calculus. So formidable did the case appear, that even then I could not exclude from my mind the possibility of a new growth, but I advised immediate extraction of the stone by incision. This, owing to business reasons, the patient could not accede to. I saw him from time to time, and on December 24th the mass in the floor of the mouth appeared so threatening, the fungation having markedly increased, that I determined a new growth must certainly be present. A consultation was arranged for the 27th, as to the feasibility of removing the mass in the neck and mouth. On the 25th the patient called upon me much relieved by the spontaneous escape into the mouth of a fragment of calculus, the size of half a large almond. On the few days following other portions of stone

spontaneously escaped by ulceration. Some fragments were doubtless lost. Those obtained are depicted in the accompanying plate. The specimen has been sent to the museum of the College of Surgeons, and consists largely of carbonate of lime. After the extrusion of the calculus all swelling rapidly subsided, and when I last saw this patient, with the exception of an insignificant lump in the submaxillary region, he was well.

The fungation in the floor of the mouth was on a par with exuberant granulations in connection with necrosed bone, which have so often been confounded with malignant disease. The great swelling and hardness of the submaxillary gland were doubtless due to retained secretion and inflammation, and was analogous to those cases of hardness and induration in the breast, observed when there is an obstruction to the flow of milk. A relation of this case needs no further remarks, to point out its importance, with regard to the diagnosis of affections of the floor of the mouth.

MEMORANDA:

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

SCARLET RASH AFTER ENEMATA.

As a well-marked instance of this condition the following case may be of interest.

K. C., an unmarried girl of 20, presented severe symptoms of gastric ulcer, and in order to procure absolute rest for the ulcer, a course of rectal feeding was advised. Preparatory to this, on October 23rd, a full soap-and-water enema was given in order to evacuate and cleanse the lower bowel. On October 24th the nutrient enemata were commenced, each consisting of 9 ounces of milk, $\frac{1}{2}$ -ounce of beef juice, and one egg (in all a little more than half a pint), the whole being peptonised. The enemata were administered three times daily with the hips well raised, and were retained comfortably. On the same day (October 24th) the rash appeared on the face, accompanied by an intense burning sensation; and on the morning of October 25th the rash was fully developed, and was distributed with accurate symmetry over the following regions: the forehead, the upper parts of the cheeks, the chin, the whole of the neck, the buttocks, and the upper part of the backs and fronts of the thighs. The rest of the legs, the arms, the trunk, and a patch on each cheek were free. The temperature was normal, the throat slightly red, and the tongue markedly so, having a "bare" appearance. The rash resembled a very small-whealed urticaria, becoming confluent in places, and producing a suffused and swollen condition of the skin. The rash disappeared as quickly as it had come, although the nutrient enemata were continued regularly.

The chief features of interest in the case were the accurate symmetry and the fact that the rash subsided although no interruption was made in the rectal feeding by somewhat large enemata, a circumstance which tends to bear out Dr.

Suckling's view¹ that the rash is due to absorption of faecal matter softened by the enema, as it did not recur when fluid was injected into the bowel after it was emptied of faeces.

Eton.

G. E. HALE, M.B., B.C.

ACUTE GENERAL ERYTHEMA AFTER CHICKEN-POX.

The patient was a baby, 14 months old. Six months earlier he had had a severe attack of broncho-pneumonia, which left him very feeble, but from which he thoroughly recovered. He had been weaned for four weeks, his principal diet being bread and milk and crushed oats. A few days previous to my seeing him he had chicken-pox; the pocks were drying up when I saw him on January 26th. He was then suffering from an acute general erythema of the face, right side of the body, and both arms and both legs; there was marked oedema of the face (eyes and lips swollen), of the hands and feet, and scrotum; there was redness of the conjunctiva, and he was not able to bear the light; he had abundant nasal catarrh and salivation. There was no cough, but slight catarrhal sounds at the base of the right lung; the heart was normal. The bowels were slightly constipated, with rather offensively-smelling motions; he was passing an ordinary quantity of urine. There was no albumen or sugar in the small quantity which was obtained for examination. The temperature was 100.4° F., the pulse 150.

To all appearance the child seemed to have acute nephritis, but the condition of the urine, however, contraindicated this. The erythema became alternately bright and faded; when at its height the child was very irritable.

I ordered calomel gr. ij and small doses of citrate of potash, the erythema to be covered with zinc oxide ointment. Next day (January 27th) the redness had subsided slightly, but the swelling persisted. I then suggested four hot baths daily. By the evening of January 28th, after the baths, all the swelling and redness had subsided. On January 27th I noticed that the erythema, after almost fading, started afresh from urticarial centres, spreading very rapidly.

The cause of the acute attack may lie in either the weaning of the child, the attack of chicken-pox, or some erysipeloid absorption from the scabbed-pox.

Bootle.

W. N. CLEMMEY, M.R.C.S.Eng.

MATERNAL IMPRESSIONS.

THE account by Dr. H. Lewis Jones in the BRITISH MEDICAL JOURNAL of February 23rd of a case of the above recalls to my mind two which came under my notice. In the one the lady had been greatly interested in a story which her husband had read to her in which one of the characters was described as having a supernumerary digit. She told me that this fact became very strongly impressed on her mind, and that it often recurred to her. When the baby was born it was found to have a supernumerary and rudimentary digit on one of the hands. In the other case the lady had seen a man passing along the street leading a performing bear with a ring in its nose. The animal becoming refractory, the man pulled the rope by which he led it with such violence that the ring was, as she described it, torn through the brute's lip. She was very much impressed with the sight, and told me that she found herself very often thinking about it. When her baby was born it was found to have a slight, but quite distinct, hare-lip. None of their other children had shown any such deformities, and in both cases I inquired most particularly into the family histories, but could find nothing to account for them. Both ladies were perfectly convinced that the circumstances as above narrated were the only cause for the deformities. Like Dr. Jones, I give these cases for what they are worth, the relations between the alleged cause and effect being fairly direct.

Aberdeen.

J. JENKYN, M.D.

SCARLET FEVER DURING PREGNANCY: ABORTION: RECOVERY.

ON November 23rd, 1894, I was called to the house of Mr. C., and discovered that two of his children were suffering from scarlet fever, and that the mother, who was in an advanced condition of pregnancy, was nursing them. The usual treat-

¹ BRITISH MEDICAL JOURNAL, 1894, i. p. 1190. See also *ibid.*, p. 1413; *ibid.*, p. 12, p. 867; *Lancet*, December 15th, 1888.