scars, being situated almost entirely in the papillary layer, and beyond transitory staining involution is usually thorough and complete. In the most highly developed lesions a pseudo-papillary formation occurs, and one of the first cases of bromide rash on record is reported by Beigel as a case of papilloma of the skin.

IODIDE ERUPTIONS.

The first case to which I will call attention is a fine illustration of what is generally called the bullous iodide eruption, but this is not quite correct, as I shall presently show. The patient was a man aged 30, a painter, under my colleague Dr. Frederick Roberts, and I was asked to see him for the diagnosis of the eruption which had appeared on the face and neck three days previously, and had developed into the condition well depicted in the drawing (see Fig. 3). Recognising that the eruption was due to iodide of potassium, I inquired for kidney or heart disease, which might interfere with elimination, and I was informed that the man had albuminuria, probably from the large white kidney, and that he had taken 5 grains of iodide of potassium three times a day for four days, and that the eruption had begun to appear a few hours after the first dose. As usual, in spite of their bullous appearance, on pricking one of the lesions only a small drop of clear fluid exuded, the pseudo-bullæ being, in fact, solid. The discrete bullæ were distinctly raised about one-eighth of an inch, were flatly convex, of pearly translucent appearance, with a narrow red areola. Many were confluent into large plateaux of several square inches in area, but the component elements of the patch were still discernible. The man good-naturedly allowed me to remove a medium and a small vesicle which were close together; and I am therefore able to show a section under the microscope in which the solid nature of the lesion is evident. It is due to a copious cell exudation pushing up the epidermis as a whole. It has been a disputed point as to whether lesions were seated at a hair follicle or not. This specimen shows clearly enough that it may be round a hair follicle, but that they are not essential to the process is proved by their occurrence in scar tissue, where there are no hair follicles or glands, just as we have seen that bromides have a special predilection for cicatrices.

[Drawings of other iodide eruptions were shown. In one there was very extensive scarring and fungation of the sores in a man with mitral regurgitation. The drug had been given perseveringly on the supposition that the lesions were syphilitic. The photograph of another case was shown in which the lesions were solid nodules of the same colour as the surrounding skin.]

In this case (Dr. Crocker continued) I made the diagnosis from the description and the photograph, as I never saw the patient, and in the face of apparent proof that he had had no iodide of potassium. On cross-examination, at my suggestion, it was clearly brought out that the eruption appeared after taking a quack medicine called "Clarke's Blood Mixture." The man was a chronic drinker, had jaundice and other symptoms of hepatic disease, but there was no albuminuria. He was also very sensitive to arsenic, showing symptoms of arsenical intoxication after a few 2-minim doses—all being evidence of his defective power of elimination.

DIFFERENTIAL DIAGNOSIS.

On comparing bromide and iodide eruptions we find great resemblances, but also a few differences which enable us often, but not always, to distinguish the one from the other. The compound bromide eruptions are, as a rule, more pustular than those from iodides. The latter are, as a rule, bullous or pseudo-bullous, which is a rare form of eruption from bromide of potassium. On the other hand, I have never seen in iodide eruptions the aggregation of small pustules on a raised inflammatory base which is typical of bromide rashes.

Bromide eruptions are most common in children, those from iodides in adults, but this is probably largely because children seldom have iodide of potassium given them, and except to epileptics, bromide is not often given for any long period to adults, while iodides are very frequently given to adults for many conditions. Nevertheless, there is over

and above this a special susceptibility in infants to bromine in all forms, and even such small quantities as could be derived from the mother's milk when she was taking the drug have produced the eruption in the suckling infant. There is no doubt, however, that iodide eruptions are the most serious in persons with defective elimination, as several fatal cases testify.

TREATMENT.

Treatment of these cases, both from bromides and iodides, is simple. Of course the drug must be stopped; but the eruption, it must be borne in mind, may continue to come out for some eight or ten days after the cessation of the exciting cause. If the patient is old enough, copious diluent drinks should be given to promote diuresis. Liquor arsenicalis in 3 to 5 minim doses three times a day should be given internally, and simple antiseptics, such as boric acid ointment, may be applied externally if there is any denuded surface requiring protection. Under this kind of treatment the lesions dry up, shrink, and involute, so that when the scab falls off nothing but a reddened surface marks the site of the lesion. Occasionally a few hypertrophied papillæ require to be snipped off. Much, however, may be done in the prophylaxis of these eruptions.

Do not give iodides to people with chronic renal or heart disease. Where, as in epileptics, bromides have to be taken for long periods, it is often possible to omit the bromides for one, or even two, days a week without losing control over the fits. Arsenic, too, has a prophylactic as well as curative effect for both bromide and iodide eruptions, and 2 or 3 minims of Fowler's solution may be combined with the bromides, but this, too, should not be given for long periods continuously, or arsenical pigmentation and keratosis may be produced in a high degree.

Another plan is said by M. Féré to be prophylactically successful—namely, to produce intestinal antisepsis by means of naphthalin internally, or, as I prefer, by salol gr. v three times a day. This method requires further trial, but I commend it to the attention of those who have to treat chronic epileptics.

THOMAS'S OPERATION FOR BENIGN TUMOURS OF THE FEMALE BREAST.

By ALEXANDER JAMIESON, M.A., M.D.,

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IN the BRITISH MEDICAL JOURNAL for 1888 (vol. i, p. 1216) I published a case of this operation, illustrated by a woodcut from a photograph, which showed that a tumour as large as a Tangerine orange may be removed from the shapely breast of a young woman without a trace of mutilation and with hardly a trace of interference. Such a result is so desirable from the cosmetic point of view, while the risk of breast tumours, benign at their origin, assuming disorderly action and becoming malignant or semi-malignant is so great, that it is a matter of surprise to me that the procedure with which, in 1882, Gaillard Thomas enriched surgery has not received more attention than has actually been accorded to it.

Mr. Bryant¹ alludes to it without comment; Dr. Hayward,² of Liverpool, reports a successful case. I have referred to four cases and published one in full, and now offer another. I have not found any other reference to the operation in European or American professional literature, though of course I do not pretend that my search has been exhaustive. This paucity of published instances is no doubt largely due to the comparative rarity of the cases to which the operation is suitable. But that the method is of great value is undeniable, inasmuch as it induces patients to consent to operation at a period when their disease is manageable, and thus saves them from the worse than doubtful chances of their future. In none of my cases could I have obtained consent to operation, once the growth was declared non-malignant, had I not been able to promise recovery without deformity. Accordingly I venture to make a second claim on the already

¹ *The Diseases of the Breast*, p. 107.

² BRITISH MEDICAL JOURNAL, 1889, vol. i, p. 410.

far overtaxed hospitality of the JOURNAL, and ask attention to the accompanying woodcut from an untouched photograph taken three months after operation.

The case now briefly reported is that of an unmarried American missionary lady, aged 26, who, without any history of local injury, noticed, in February, 1892, a nodule, the size of a large bean, in the lower external quadrant of the right breast. There was no family history of any significance. Menstruation had been established at 14, and the periods had ever since been in every respect normal. She was seen on May 12th, 1893, when, in the position indicated, a smooth, somewhat elastic, spherical tumour, perfectly movable, about the size of a large walnut, was perceptible about half way through the depth of the gland. It was slightly sensitive to pressure; it underwent no change of any kind during menstruation, but, independently of this, had lately become the seat of severe paroxysmal pain, lasting for a couple of hours at a time, and then disappearing completely for seven days. Nipple and areola normal. In the lower hemisphere of the left breast there were a number of small, hard, indolent nodules, evidently lobules of the gland. These disappeared

completely within a fortnight after operation on the right breast, and were evidently due to sympathetic irritation. Precisely the same phenomena had been observed in one of my previous cases.

The operation previously described was performed, and the tumour was easily shelled out from behind. It proved to be an example of the ordinary non-cystic adeno-fibroma of young women. There was no suppuration. On the twenty-second day, the wound being then soundly healed, the patient left for her mission station, where she at once contracted typhoid fever. From this she was convalescent in three weeks, and the disease appeared to have no hurtful influence on the consolidation of the site of the operation.

On August 3rd, 1893, the breast was photographed: and on the following day the patient married. Six weeks later I saw her, and it is perhaps worthy of note that, although both breasts had considerably enlarged since marriage, no pain had been induced in the operated gland, which, as will be seen, had perfectly preserved its natural shape.

OVARIOTOMY DURING PREGNANCY.

By E. HOOPER MAY, F.R.C.S.

Surgeon, Tottenham Hospital

Mrs. C., aged 22, was admitted into the Tottenham Hospital on April 5th, 1893. She was a pale, delicate-looking, diminutive woman, with an anxious expression and an enormously distended abdomen. She was probably at about the end of the eighth month of pregnancy. She had been insufficiently nourished of late. She had been married four years, and had had one child, now 2 years old; no miscarriages. Menstruation was regular till her first pregnancy; she had not menstruated since. She suckled the child till after it ran about. During the summer of 1892 she first noticed that her abdomen was becoming prominent. She had then some swelling of the legs, which had since gone down. The abdomen continuing to increase in size, she attributed her condition to pregnancy. At Christmas the abdomen appeared to be nearly as large as when admitted. The measurement on admission was 50 inches in circumference at the umbilicus, and 27 inches from the ensiform cartilage to the pubes.

Palpation gave the impression of the presence of a large cyst. On vaginal examination the os uteri was felt high up and far back; it could just be reached by the finger tip, and was felt to be soft and open enough to admit the tip of the finger. What seemed to be a child's head could be just felt. Notwithstanding the late period of pregnancy, on account of the patient's half-starved condition it was thought best to feed her carefully for a few days before operating.

She improved rapidly in appearance, and on April 12th at 3 P.M. the operation was done. On opening the peritoneum adhesions were found, and the wound was enlarged quite up to the umbilicus, about 4½ inches altogether. Slight parietal adhesions were broken down, and the cyst tapped, about 36 pints of brown fluid escaping. More slight adhesions were then broken down, giving rise to very slight bleeding, and one large strong parietal adhesion and one to the omentum were ligatured and divided. The pedicle, which was about an inch wide, was tied in the usual way, and the peritoneal layers were stitched together over the face of the stump with