was increased, its cellular elements were abundant; the ganglionic cells were more or less deformed, undergoing various degrees of pigmentary degeneration; the vessels were dilated and hypertrophied in two cases.

Fig. 3.

Fig. 3 is taken from the ganglion of a typical case of contracting kidney, which had been under my observation for two years. The kidneys weighed together four ounces. The stroma of the ganglia was much increased in breadth, but contained very few cell-elements, either round or spindle-shaped; the ganglionic cells were few in number, shrunken, and undergoing advanced pigmentary degeneration. The vessels were dilated and hypertrophied in every case.

It will probably be allowed that the vascular dilatation and hypertrophy formed part of the general affection of the vessels in granular kidney, so that they need not be again referred to in discussing the significance of these changes. The process appears to begin in the stroma of the ganglion, and in its acuter forms is characterised by infiltration of this tissue with lymphoid cells; this is followed by increase in the connective tissue, and finally by the formation of a hyaline stroma, poor in cell-elements or nuclei. The ganglionic nerve-cells are affected secondarily, and as a result of this chronic disturbance of nutrition. They undergo pigmentary degeneration, which destroys their protoplasm, and converts them into masses of dark granules obscuring the nuclei, which are also probably eventually destroyed. These observations confirm the accuracy of the description in the original paper, but I must dissent from the use of the term "fatty" to express the change in the ganglionic nerve-cells. In my preparations, the change is that generally called in this country pigmentary degeneration, a common lesion of nerve-cells in chronic diseases of the nervous system, and probably a normal factor in the senile decay of these elements; but I am disposed to think this difference to be merely verbal. The point upon which I join issue with Drs. Da Costa and Longstreth is on the significance of these lesions.

As I have already shown by quotation, they regard the ganglionic lesions as the cause of Bright's disease, or some form of it, especially the contracting kidney. We might reasonably inquire why it was that, having found changes in so many different types of Bright's disease, they are disposed to restrict this relation to the contracting kidney. It is not for me to suggest an answer to this question; but this restriction makes their meaning less clear and their reasoning less logical.

I think we cannot escape from the conclusion that the ganglionic lesions stand in the same relation to all the forms of Bright's disease. There is nothing to suggest that they are more likely to be primary in one form than in another; so that, if we hesitate to regard acute Bright's disease as primarily a disease of the renal ganglia, any objections which weigh with us in this case should hold good in all. It may be thought that the insidious mode of origin of the contracting kidney makes it a fairer field for speculation than the other forms of Bright's disease; but I would earnestly protest against the assumption that the obscurity of a problem justifies the introduction of

crude hypotheses resting on ambiguous facts and doubtful analogies. A moment's reflection, moreover, will assure us that we really know no more of the actual mode in which the kidney is affected by, for example, the poison of scarlatina, than we do of that of gout.

But I may be asked, Are not Addison's disease and Graves's disease analogous cases? To this I would answer, that it has never been proved that the changes in the sympathetic ganglia in these still very obscure diseases are primary, and that quite similar changes have been described in the ganglia in diffuse eczema (Marcardi), pseudo-hypertrophic muscular paralysis, and pernicious anemia (Brigidi), gliosarcoma of the brain (Morselli), general paralysis of the insane (Poncaré and Bowset), cholera (Pio Foa), and diabetes. Moreover, Giovanni (*Patologia di Simpatia*, Milan, 1876) found cellular infiltration of the sympathetic ganglia in an immense variety of visceral and general diseases, showing that structural changes in the organs is very generally accompanied by signs of irritation in the ganglia. One of my cases of contracting kidney, in which the ganglionic changes were in every way typical, was a death after ovariectomy, in which the pelvis of the kidneys were dilated, and there was reason to believe that the disease originated from pressure on the ureters. If this were so, the ganglionic changes would only be the results, or at most the concomitants, of the renal mischief.

It is probable that, in all inflammations, the vaso-motor centres may be affected practically immediately in point of time; and it is possible that structural alterations take place in the ganglia as early as in the inflamed part. It is also quite possible, that some poisons may act directly upon the ganglia, and not reflexly through the tissues of the organs; but this is a point upon which we have no definite information. No doubt, there is a tendency to ascribe greater influence to primary functional disturbance of nerve-cells than we were used to do; and, for my part, I cannot but think this tendency exists to an inordinate degree, considering the very slender basis of fact upon which it rests.

Though I dissent from their conclusions, I wish to acknowledge the accuracy of the observations of Drs. Da Costa and Longstreth, and the importance of their contribution to the data of Bright's disease.

Sponge-grafting.

By P. W. PERKINS CASE, M.B. & C.M. Edin.,

Assistant Resident Medical Officer, Whitechapel Infirmary, E.

THE very interesting articles, in the JOURNAL of December 16th, by Drs. Sanctuary and J. Ferguson, will, I hope, help to bring sponge-grafting before the profession, that it may get as extensive a trial, as, I think, it deserves.

My notes furnish six successful cases of sponge-grafting done here, and others have been done by my senior colleague, Dr. Hott. All I have tried have had the sponge completely transformed before the patient's discharge, with one exception, viz.: a woman who before complete transformation had taken place, went out to see her soldier son on his leaving for Egypt.

Our method is to get the finest Turkey sponge, free from grit, etc., and slice it as thin as possible, soak it in acid nitro-hydrochloric oil for two or three weeks, till all the calcareous and silicious matters are dissolved, then after repeated washings with water, it has a very soft, velvety feel; this, neutralised by washing with liquor ammoniac and steeping in carbolic acid solution (1 to 20) for twenty-four hours, is ready for use.

A healthy granulating surface is required for it; we prefer that of a burn, especially if there have been loss of subcutaneous tissues. First, we gently scratch the granulations till they bleed slightly, then place pieces of this sectioned sponge about the size of a shilling on the bleeding granulations, and they soak up blood, which, coagulating in the meshes of the sponge, forms thereby a temporary adhesion. The superficial wound-surface, if less than two inches square, we entirely cover with sponge; if more than about two inches square, we cover it about half irregularly, with pieces of that size, and dress it after the Listerian method with oiled silk, six or eight piles of sanitas gauze, gutta percha tissue, and bandage. Sanitas lotion is generally used afterwards at the dressing, it being not so irritating as carbolic acid. The dressings are usually taken down the second day, and the grafts are then found firmly adherent by the coagulum, and comfortable; afterwards dressed every second day; but great discharge requires daily dressing.

Dr. J. Ferguson mentions one of his cases that went wrong. He says: "The patient complained of much pain extending up the limb, and the appearances of erysipelas were found spreading from the

ulcer upwards," and "the patient declared himself the subject of idiopathic erysipelas." Three similar cases I have seen, two of them being Dr. Hott's. I have no notes: but with these, from the seventh to the tenth day the same occurred locally, and in each there was a febrile state of the patient, but, in addition, the sponge with the pus in its meshes was putrefying, and only removal of the sponge by charcoal poultices, complete cleansings, and saline medicine reduced these symptoms; we, therefore, considered each to be local blood-poisoning; and afterwards, when treating a large granulating surface, we placed grafts irregularly (as before mentioned), to obtain the best possible means of cleansing the grafts and lessening the surface of sponge for absorption. I fancy Dr. Ferguson's may have been similar.

Like him, we also found, after the removal of the grafts by poulticing, and a healthy state restored "that what had been the type of indolence and obstinacy among such sores, was now the picture of healthy action—the surface abundantly vascular, and standing well up towards the level of the skin. The simplest dressings were now sufficient to promote repair." What was the cause of this sudden change? The change was, I think, due to the fact, that the loops of capillaries entered the sponge from the granulations below, proceeding upwards, and between the time of the placing the sponge on the wound and its general removal by poulticing, some of the sponge was secured and held on by the granulations; and when the mass of sponge was removed, some very minute portions were left, which were veritable grafts, producing the effects he describes.

The sponge, like a catgut ligature, appears to become completely organised. The graft, partially filled with clot, becomes paler in colour, and especially so at its edges, then, more of a jelly-like and homogeneous consistence; and at the margin, it will become lost in granulation-tissue having no line of demarcation; this invasion continues from without inwards until the last little central island of sponge-texture, as such, disappears.

As far as I have observed, sponge does not appear to be transformed into epidermis; if eventually to cutis vera I have, so far, had no means of determining; but in a patient, whose ulcer of sixteen years' existence I grafted on August 9th last (it then being fiddle-shaped, over the front of the lower third of his right leg, six inches long, and about two and three-quarter inches wide at each side, and one and three-quarter inches at the middle,) it duly transformed to granulations-sponge grafts equal to about half its superficial area; but I am yet waiting, and I fear in vain, to see the transformation into epidermis completed. Cuticular covering has gone in considerably from the margins, but now proceeds very slowly. In a small wound, and especially in a recent burn, if small, this want of cuticle is rarely experienced over the soft parts, because of marginal growth and drawing on the surrounding skin.

Lastly, I must acknowledge Professor Hamilton's valuable paper on sponge-grafting in the *Edinburgh Medical Journal* of November 1881, as the source of my ideas, and would recommend those interested in the subject to read it.

OBSERVATIONS ON RECENT OVARIAN CASES.*

By W. H. FOLKER, F.R.C.S.,

Surgeon to the North Staffordshire Infirmary.

SHORTLY before our last meeting in the spring, I operated for ovarian disease on a woman aged 45. The disease had existed for a considerable time, and she was such an enormous size, as hardly to be able to move about without assistance. When operated on, the cyst was found to be so intimately adherent at every part, that it was quite impossible to separate it from any part to which it was attached. A Keith's glass drainage-tube was, therefore, inserted, and the wound closed. At the end of a week, the cyst was syringed out with a weak solution of iodine in water, and the patient made a steady and uninterrupted recovery.

When she left the infirmary, the cyst was firmly consolidated, but a small opening still existed; and, though I have seen her several times since, and tried many applications, the small granular spot remains, giving out a slight discharge, which proves an inconvenience, but nothing more; it is now about as big as a shilling.

In August last, I operated on a single young woman, aged 25, for ovarian disease, which had been increasing rather rapidly; her opposite ovary was found to be becoming cystic, and was removed at the same time (which I now show you).

On the third day after the operation, her temperature suddenly went up, and the day after a rash appeared resembling measles, which lasted four days, appearing to be at the height on the third day. She also had a discharge resembling the catamenia, but with all, recovered in about a fortnight.

A few days afterwards, I operated on a private patient, married, aged 52, who recovered in six days, without a bad symptom; and shortly after on another, aged 46, who recovered in five days, but in whom a sort of catamenial discharge appeared pretty profusely.

At our last meeting, I showed the ovaries I had then just removed from a patient, whose case I promised to relate at this meeting; but our late house-surgeon having mislaid my notes, I am unable to do so; but in this case also a catamenial discharge occurred rather smartly; and in two of these cases, a sensation has subsequently been felt as if it were coming on again, though it has not done so.

I have not troubled you with any details, the object of the paper being to record the peculiar appearance of a catamenial discharge in patients when both ovaries are removed; and I also wish to mention the method I adopt of closing the abdominal wound, to which I attribute in a great measure the rapidity of recovery in these latter cases. Formerly, when closing the abdominal wound, I passed all sutures through the peritoneum, and, I now think, left them in too long; for I several times noticed that, after the stitches were removed, there was a little tenderness, and, when the finger was pressed on the part, a drop or two of pus was perceived at the place where the suture had been.

I now close the wound with five stitches, the second and fourth only of which are passed through the peritoneum; the three others include everything but the peritoneum. The edges of the wound being clean, and sponges removed, the second and fourth stitches are first tied, seeing that the two opposing surfaces of the peritoneum are brought well and firmly together; the others are tied afterwards, and the dressings applied.

On the third day, the stitches passing through the peritoneum (the ends of which had been left long for distinction) are removed, as by this time the peritoneum should be pretty well glued together, and its cavity closed; the other three stitches hold the abdominal walls firmly together without interfering with the peritoneum.

By this method, we get the peritoneal cavity perfectly closed with the smallest amount of interference, and in the shortest possible time, and are able to leave the remaining sutures any time that circumstances may require without the slightest detriment.

Boroglyceride was used in all the cases.

REPORT OF THE BRITISH LYING-IN HOSPITAL FOR 1881 AND 1882.

By HEYWOOD SMITH, M.D., and FANCOURT BARNES, M.D.,
Physicians to the Hospital.

In the year 1881, there were 160 deliveries in the hospital, with 1 death, giving a mortality of 0.625 per cent. There were born 61 male children, or 31.875 per cent.; 96 female children, or 60 per cent.; 4 twins, or 2.5 per cent. Of the mothers, 32 were primiparæ, or 20 per cent.; and 128 were multiparæ, or 80 per cent.

Of the children, 6 were still-born, or 3.75 per cent. There were 8 breech cases, or 5 per cent.; 4 forceps cases, or 2.5 per cent.; 3 cases of *post partum* hæmorrhage, or 1.875 per cent.; 1 case of turning, or 0.625 per cent.

There was one case of atresia of the vagina, which was divided by the metrotome by Dr. Fancourt Barnes, and in which delivery was then effected by the forceps. This case recovered without any rise of temperature. The child, a male, survived.

The morbidity in the hospital was unusually small. Among the primiparæ, the temperature did not exceed 100° Fahr. in 14 cases, or 8.75 per cent.; among the multiparæ, in 42 cases, or 26.25 per cent.—making a total of 56 cases, or 35 per cent. of the total deliveries in the hospital, in which it did not exceed 100° Fahr.

In 5 primiparæ, the temperature was over 100° Fahr., but not over 101° Fahr, or 3.125 per cent.; in the multiparæ, 18, or 11.25 per cent.—giving a total of 23 cases, or 14.375 per cent. of the total deliveries, in which the temperature did not exceed 101° Fahr. In 12 cases only did the temperature rise above 101° Fahr.

In the year 1882, there were 172 deliveries, with 1 death, or a mortality of 0.58 per cent. Of the children, 85 were males, or 48.8 per cent.; 88 were females, or 50.5 per cent. There was one case of hermaphroditism, which survived three weeks, and which proved, on *post mortem* examination, to be a female. Seven children were still-born, or 4.7 per cent. (2 males and 5 females).

* Read before the Staffordshire Branch.