CASES OF GOITRE; WITH OBSERVATIONS.

By S SCOTT ALISON, M.D., Licentiate of the Royal College of Physicians, London.

CASE I. On the 19th January 1847, Ann Wilson, aged 19 years, unmarried, of pallid complexion and lymphatic temperament, and daughter of Mrs. W. (Case II), applied for advice for Goitre, at the Northern Dispensary. Menstruation had begun three years before, and though somewhat scanty, had been regular. The tumour (observed for the first time nine months before), extended from the larynx to the upper part of the sternum, and reached from the sterno-mastoid muscle of one side to that of the other. The swelling was doughy to the touch, soft, and uniform. A tonic appearing to be indicated, the infusion of gentian was prescribed: an ointment of the iodide of potassium was applied locally. On the 6th February, no material improvement having taken place in the tumour, a mixture containing iodide of iron was ordered. For the purpose of regulating the bowels, a few grains of the aloes and myrrh pill were prescribed. By the 9th of March, this treatment having effected no obvious change on the tumour, a long plaster of ammoniacum and mercury, spread on sheep-skin, about three inches in breadth, was procured. One end having been fixed at the back part of the neck, the plaster was brought round to the front and applied with gentle pressure over the tumour, then carried by the other side of the neck to the part already fixed, and applied upon it. No inconvenience, either in respect to respiration or to the circulation of the blood, was produced. The further use of the iron and pills was ordered. About a week after, the patient attended at the dispensary; she had been compelled to remove the plaster on the fifth day after its application, in consequence of a sense of itching in the part. The tumour was decidedly reduced in volume, the cuticle was desquamating freely, and the integuments were somewhat reddened. On the 16th March, the patient again presented herself at the dispensary. The house-surgeon, Mr. Dalton, was satisfied of the reduction in the size of the tumour, and another plaster was applied. Three days after, the patient came again, and complained of the irritation induced by the plaster; it was removed. The integuments were found sub-inflamed, and secreting serous fluid at several points. The tumour was decidedly still further reduced in volume. At this examination, a slight venous murmur was heard at the base of the right side of the neck; it was faint, but increased by gently pressing with the edge of the stethoscope, and by directing the chin to the opposite side, and upwards. No venous murmur could be heard on the opposite side of the neck, although every means were used to insure its detection if present.¹ The gums and the conjunctivæ

¹ In numerous examples of moderate anæmia, I have found the venous murmur confined to the right side of the neck. This suggests the propriety of not being satisfied with the examination of the left side only, in searching for this phenomena. I am disposed to refer this remarkable disparity, to the difference in the course of the venous trunks of the two sides. The vena innominata of the right side is almost vertical, while that of the left pursues an oblique course from above downwards, and from left to right. The vertical course of the right vena innominata is more favourable to the rapid descent of the blood, than the oblique course of the left, and rapidity of the circulation favours the vibration of the walls of the veins, and of the column of contained blood—the sources of venous murmur.

of the eyes were pallid; the urine was reported to be scanty, but clear; and the bowels, it was ascertained, were moved only in the course of two or three days. The continued use of iron was enjoined, and broad strips of soap cerate plaster, spread on leather, were applied in the same manner as the other plaster. Means were adopted to insure the efficient operation of the bowels. On the 26th of April, I saw the patient for the last time. The tumour was then greatly reduced in size, but by no means entirely gone; the venous murmur was still perceptible on the right side of the neck. The plasters were again ordered; the iron was omitted for a time, and replaced by decoction of cinchona, with dilute sulphuric acid. I have no later information regarding the patient.

CASE II. Mrs. Wilson, about 45 years old, native of Yarmouth, came to London twenty-six years ago. She is the mother of the former patient. The patient was tall, of pallid complexion, and rather sickly. On the 19th January 1847, she applied for assistance on account of a swelling of the thyroid body; it made its appearance, for the first time, five years before, since which time it has gradually increased in size. The physical characters of the tumour were those of Goître, but the volume of the growth was decidedly less than that of her daughter. No record has been preserved of the treatment or of the result.

CASE III. April 7th, 1847. Louisa Ship, 15 years of age, a tall, fat girl, had an attack of typhus fever three years ago. A month after recovery, the thyroid body was discovered to be swollen. From that time, the swelling continued to increase, till some weeks previous to the above date. When first examined, the tumour was very considerable in size, and involved both lobes. It then extended from the larynx to the sternum, and was most voluminous at the lower part. It was soft throughout. Before menstruation, which took place for the first time six months before, and had since been regular, the tumour increased somewhat in volume, and partially subsided during the progress of the evacuation. This case was treated with iodide of iron, the regular administration of the aloes and myrrh pill, and with strips of plaster of ammoniacum and mercury, as in Case I. The result of the treatment was very satisfactory: in a short time, the tumour had undergone a very considerable reduction; no inconvenience whatever attended the use of the plaster. The record of this case extended over a short time only, so that I am unable to say what the ultimate result was; but everything promised that it would prove very favourable, if the treatment were duly persisted in.

CASE IV. On the 23rd June 1847, Louisa Wilson, aged 18, cousin and niece respectively of patients 1 and 2, sought assistance on account of Goître. She was a native of Yarmouth. Neither her mother nor sisters had suffered from swelling of the neck. She was delicate, short, pallid, and weak, and underwent much fatigue as a dress-maker. She menstruated every six weeks, and for six days each period. She complained of fullness of neck between the larynx and sternum, which began six months before. The thyroid body was decidedly, yet not very much enlarged. The tumour was soft, and doughy; a loud venous murmur was heard on each side of the neck; the patient vomited occasionally; and the bowels were constipated. The case was at first treated with the aloes and

myrrh pill, and with infusion of gentian in combination with tincture of hops. The general health improved much. The plaster of ammoniacum and mercury was employed, as described in Case 1. The tumour was soon reduced in bulk; but, as happens frequently with dispensary patients, the young woman did not continue her attendance long enough to give an opportunity of judging of the success of the practice, or even to permit the administration of iron, which the irritable state of the stomach prevented at first.

Goitre appears to be rarely seen in London. The four cases described in this paper, comprise all that I have met with, in private and dispensary practice, during the nine years I have resided in the metropolis. This comparative immunity may be owing to substantial diet, to the use of malt and spirituous liquors, to the active habits of its inhabitants, and the free ventilation of most parts of the town and suburbs. I met with an example of swelling of the neck, which was brought to London for advice, as a case of Goitre, reported to be a disease of great prevalence in Roxburgh, the patient's native county. The patient was a weakly child of a clergyman. On examination, I found this so-called Goitre to be an indolent strumous abscess, which the point of the lancet reduced to very diminutive proportions in the course of a few minutes.

The four cases above described indicate that Goitre, at least as it appears in this country, is, for the most part, associated with general debility. In Cases 1 and 4, anæmia¹ was present, besides general debility; in Case 2, there was pallor of complexion and debility to some extent; and in Case 3, the immediate cause or precursor was typhus fever. The morbid growth, too, is deficient in vitality. The increased volume of the organ is not irreconcilable with this view, for it is not unusual for an organized part to be at once weak and hypertrophied. In the vegetable kingdom we have constant examples of fruits and roots attaining to an enormous bulk, yet displaying unmistakable signs of weakness of structure. Nor is the occasional presence of pus, and other products of active and vigorous action, in the true Goitre, destructive to the view of the disease being one of local debility or weakened action, for it is not unusual for a growth, the result or the seat of impaired vitality, to become the subject of inflammation under the influence of certain exciting causes.

The disease is a local one, notwithstanding that it appears to be favoured in its rise and progress by certain general morbid conditions of the system, as already shown. In this respect, Goitre only resembles other local diseases. In my experience, chronic enlarged glands, in various parts of the body, have followed fever and other weakening diseases. Under the same circumstances, I have remarked the joints of children to become greatly enlarged. Besides certain general conditions, such as mere debility, anæmia, and the like, which assist in

¹ DR. JAMES BROSIE, an eminent physician of Edinburgh, my esteemed friend and former master, has, in a valuable paper, published in a late number of the *Monthly Journal of the Medical Sciences*, called the attention of the profession to the relation of Goitre to Anæmia. The relation of the two diseases was prominently in my mind in 1847; one of the titles of two of the preceding cases in the index to my Note-Book being, "the alliance of Anæmia and Bronchocele."

the production and maintenance of Goitre, this disease is liable to be very commonly associated in Switzerland, with one of a very remarkable nature, *i. e.* the general hypertrophied, yet imperfect formation, and very lax, weak, and inactive condition of various structures of the body, including the brain and nervous system, known under the title of Cretinism. This general morbid condition does not appear to induce Goitre. Both diseases are of the same nature, the chief difference between them being this,—that in the first, the evil is general; in the latter it is confined to the thyroid body. The former is the disease in a general, the latter in a very restricted form. Hence it is, that Cretinism, for the most part, comprises Goitre, and that Goitre is frequently found alone.

Goitre is perhaps generally induced by the action of its immediate exciting causes upon the individual; but it is also one of those diseases which are frequently produced, without such direct instrumentality, by means of transmission from parent to offspring. At some former period, an ancestor has been exposed to its immediate causes, which have proved sufficiently powerful to induce a certain character of the thyroid gland, which is transmitted to a descendant as certainly as a mental quality, or any physical peculiarity or characteristic; and this character leads to the development of the disease under various circumstances, often in the absence of the noxious causes which had induced the disease in the progenitor.¹

The treatment is divisible into local and constitutional. The most useful local treatment is pressure applied in a moderate degree, and with caution, so as to prevent any interference with the circulation. It may be effected in the manner described in Case 1. The plaster should not be narrow, for it would then act as a ligature.² Obstructive disease of the heart, retarded circulation in the neck from any cause, the slightest tendency to head disease, and advanced age, should be regarded as contra-indicants. The old and tried remedy, iodine, is highly useful in promoting, like pressure, the absorption of the morbid growth. Mercury is likewise serviceable. Stimulants, such as ammoniacum, assist, by inducing a free action of the skin, of its perspiratory apparatus, and of its sebaceous follicles. The pressure, the iodine, the mercury, and the ammoniacum can all be comprised in the one form of a plaster!

The constitutional treatment requires the regulation of the secretions of the bowels, liver, kidneys, uterus, and skin, which are often much deranged. Fulness of the circulation from retained secretions, no less than comparative emptiness, from hæmorrhage or over-secretion, must be combated.

When the associated morbid general condition is anæmia, the preparations of iron are, of course, indicated. The iodide of iron is that which I have generally employed; it may be changed, however, from time to time. The valerianate of iron, composed of iron and vale-

¹ "The Relation of Hereditary Diseases to the General Sanitary Condition," was shown in two papers, which I contributed last year to the Health of Towns Magazine.

² The material, on which to spread the plaster, should be soft chamois leather. This will yield to the movements of the neck, and by its elasticity regain its position. It is almost invaluable as a soft, porous, retentive material for fomentations, cold lotions for the eye and head, and for many other purposes in the daily practice of medicine and surgery.

rianic acid, will be found serviceable in cases associated with hysterical symptoms, such as the globus hystericus, and other spasmodic affections.¹ After a time, chalybeates will be advantageously replaced, for a short period, by vegetable tonics and mineral acids. The most suitable of these, to alternate with the preparations of iron, are, in my opinion, the decoction of cinchona in combination with dilute sulphuric acid,—far more efficacious than sulphate of quinine; the infusion of gentian with this acid, or the hydrochloric; tannin, in doses of half a grain, dissolved in infusion of gentian and combined with nitric acid, a most efficient roborant combination, in this and many other diseases, including phthisis pulmonalis.

These vegetable tonics and mineral acids will likewise be found well adapted to cases of Goitre, associated with general debility, independent of anæmia. In such examples, requiring cordial treatment, the tinctures should be employed in preference to infusions; and when a nervine or composer is required, the tincture of hops will prove highly advantageous, either with or without the aromatic spirits of ammonia, as circumstances may indicate.

The regimen most suitable for cases of Goitre is well known, and therefore may be dismissed in a few words. It should embrace a substantial diet, regularity, and exercise in the open air. The place of residence, if infested with the disease, should be changed, if possible, for a locality with a dry soil, open country, and a pure invigorating atmosphere.

Park-street, Grosvenor-square, May 1849.

CLINICAL OBSERVATIONS.

By JOHN ROSE CORMACK, M.D. Edin., F.R.S.E., Fellow of the Royal College of Physicians of Edinburgh, and formerly one of the Physicians of the Royal Infirmary and Fever Hospitals of that City.

NO. II.—CASES OF PUERPERAL CONVULSIONS: DEPENDENCE OF PUERPERAL CONVULSIONS ON TOXÆMIA: EXPLANATION OF THE MORE COMMON OCCURRENCE OF RENAL CONVULSIONS IN PRIMIPARÆ.

(Read before the Westminster Medical Society, May 12, 1849.)

IN observations formerly made, on a Case of Scarlatinous Albuminous Nephritis,² it was stated that an albuminous condition of the urine was, *per se*, no sign of *structural renal disease*: that it indicated *congestion of the kidney*, and nothing more. I cited the experiments on rabbits made by Dr. George Robinson of Newcastle, and likewise a series of clinical facts, as amply establishing this important truth; and among other illustrations of toxæmia, caused by the congested kidneys being unable to eliminate excrementitious products from the blood, I mentioned the Convulsions of Pregnant Women.

¹ Some years ago, when the valerianate of zinc was introduced into practice, I applied to Mr. Morson for a valerianate of iron. He kindly supplied me with a small quantity dissolved in spirit; which is still in good preservation.

² LONDON JOURNAL OF MEDICINE, vol. for 1849, p. 451.