Cases of Hysteria, with Paralysis, treated by Metallotherapy. By Dr. Franz Müller, Second Physician to the General Hospital at Graz. Translated by WILLIAM SAMUEL TUKE, M.R.C.S.*

One of the most interesting discoveries of recent times in the department of Neuropathology is indisputably Metalloscopy, of which, as is known, Burqt is the real founder. But Burq did not possess the needful scientific authority, and immediately on its first timid appearance, in 1851, Metalloscopy was banished to the region of the impossible and of fancy by scepticism on à priori grounds, and, hardly born, disappeared into complete oblivion after a very ephemeral existence. And thus it remained, till at length, two years ago, Charcot, the great French neuropathologist, resumed Burq's researches, and not only confirmed them, but gave them an important extension. The twice-repeated reports! to a commission appointed by the Société de Biologie, as well as the numerous publications of Charcot, Vigouroux, and Landolt on this topic, are already become the common property of the medical public.

Regnard's \ labours have dissipated all that was "mysterious" in metallic applications, and the latter are brought somewhat, if still only slightly, nearer our comprehension, whilst, in consequence of these labours, a physico-physiological explanation is facilitated by the discovery of the fact that, in metalloscopic experiments, currents arise which are measurable by the galvanometer, a fact which Eulenburg has also demonstrated by similar experiments, performed in

a very exact way upon healthy persons.

The numerous French communications were followed by others from Thompson, Broadbent, Westphal, ** Bennett, ††

† Burq, "Nouvelle Doctrine et Nouveau Traitement des Maladies Nerveux."

Paris, 1851.

† "Premier Rapport fait à la Société de Biologie," 1877. (Reprint.) "Second Rapport fait à la Société de Biologie," 1878. (Reprint.)

§ Regnard: De l'action des Courants Faibles sur la Retour de la Sensibilité.

"Gaz. Méd.," No. 10, 1877.

|| Enlephypro, Hober Metalletherenie "Doutsche Media Westerschefft" No.

|| Eulenburg, Ueber Metallotherapie, "Deutsche Medic. Wochenschrift," No. 25 M. 26, 1878. Metalloscopie und Metallotherapie, "Wiener Medic. Presse,"

No. 1, 2, 4, 5.

¶ Thompson; Broadbent, "Lancet," 1877.

** Westphal, Ueber Metalloscopie, "Berl. Klin. Wochenschr.," 1878, No. 30.

†† Bennett, Brain, Oct., 1878, "British Medical Journal," 1878, 23 Nov.

^{*} Dr. Müller has sent us the following article, which has also appeared in the "Berlin Klinische Wochenschrift," 1879, No. 28. As the writer is a most careful observer, we attach great importance to his experiments as bearing on the vexed question of Expectant Attention.—[Eds.]

Maragliano e Seppilli*, v. Hesse,† who, however, differ from one another in really important points. Allow me to multiply somewhat the small number of other than French observations (a number sufficiently accounted for by the great scarcity of suitable material, for one does not come across patients with hemianæsthesia too often), and communicate briefly here the results of my experiments and observations, made on two patients of the General Hospital in this place, in the division of Dr. Platzl, the chief physician, whom I do not forget here to thank heartily for his kindness in giving them up to me.

These may contribute not a little to the explanation and extension of the subject we have approached.

1. Maria Manninger, aged 23, country servant girl, was first admitted 23rd Oct., 1878.

History.—1. Neither in the direct nor the collateral line have nervous or mental diseases been observed. The parents died from irrelevant maladies. Patient is the younger of two children, and up to an attack of pneumonia she always enjoyed the best health as a child. She has never suffered from convulsions.

At 17 the catamenia appeared, and, although always very scanty, they were quite regular. Since puberty she complains of intense spasmodic cephalalagia, cardialalgia, ascending feelings of heat, impressibility, and emotional excitement.

These symptoms were intensified at each menstrual period. At the beginning of 1878 she was delivered of a child, which immediately died. Pregnancy, parturition, and the puerperal state presented nothing pathological.

In July of the same year, she again became pregnant, and until the 23rd Oct. showed no trouble worthy of mention. On this day, after being extremely excited on crossing a ditch, she fell so violently with her right loin against several blocks of stone, that persistent though not excessive metrorrhagia made its appearance, as well as intense pains in the region of the right ovary.

On the night of the 24th Oct., patient had her first fit of clonic spasm, on which followed a lethargy lasting two days, thus described by those about her:—The patient lay motionless, with completely relaxed limbs, and eyes firmly closed. During the whole time complete abstinence from food and ischuria continued. She might have been taken for dead, as no respiratory movements were visible. After two days she awoke suddenly, apparently in a state of complete amnesia.

† V. Hesse, "Centralblatt für Nervenheilkunde, Psychiatrie," etc., 1879. (Reprint.)

^{*} Maragliano e Seppilli, "Studi Clinici a contributo dell'azione delle correnti elettriche dei metalli, e delle magneti in alcuni casi di anesteria, Rivista sperim.," 1878, p. 36.
† V. Hesse, "Centralblatt für Nervenheilkunde, Psychiatrie," etc., 1879.

As the convulsions, which were only twice followed by the lethargic state, recurred frequently, she sought hospital aid. Her complaints referred to violent headache, feeling of constriction in the neck, and pain in the right ovarian region.

In neither motility nor sensibility could anything anomalous be observed; only pressure in the right iliac fossa produced intense pain. Patient quitted the hospital after 17 days, without any important

change in her condition having occurred.

When at home a convulsive attack, with a two days' lethargy, again came on, as the sequel of a fresh metrorrhagia, and she was again brought to the ward.

What a different picture did she now present! I only extract from the notes what is interesting for our present purpose.

Motility.—No inequality of innervation in the region supplied by the facial. Tongue and palate with normal power of movement.

The right hand, in which no movements have occurred, is notably less powerful than the left.

The dynamometer indicates only 4 kgrm. on the right side, as com-

pared with 25 kgrm. with the left hand.

The right leg seems to be in a state of complete paralysis and relaxation. When patient is on her back, it can at the most be lifted high enough for the heel to be two finger-breadths above the horizontal line. Relatively speaking, the movements of the hip joint have suffered least, those of the knee already more notably, but the muscles supplied by the peroneal nerve the most.

Patient is unable to walk unless supported, the right leg hitches in the floor, and on attempting to proceed, is merely pulled along and

dragged after her in an awkward manner.

Sensibility.—The whole right half of the body, exactly to the middle line, proves anæsthesic. The paralysis of sensation consists in anæsthesia, thermo-anæsthesia, and analgesia. Similarly the muscular sense is abolished. There is pain in the right ovarian region, which is notably intensified on pressure. The corresponding mucous membranes participate also in the anæsthesia. (The cornea, as also a spot the size of a lentil on the nasal septum, are sensitive.)

The acuteness of hearing with the right ear is considerably diminished. The right eye is amblyopic, and reads Jäger No. 19 (whereas the left reads No. 3 with ease); there is complete right-sided achromatopsy as far as red.

The ophthalmoscopic report is negative. There is, moreover, complete right-sided loss of taste and smell.

Reflexes.—On the right half of the body the skin reflexes, as well as the abdomen reflex are completely abolished; the patellar tendon reflex is highly intensified.

Faradaic and galvanic excitability both of nerve and muscle is fully maintained, and no difference is shown between the two sides.

Action of bladder and rectum normal. Temp. 98.6° F., pulse 84, small. On account of their completeness, the to and fro convulsive attacks

may be considered, though briefly, and a short sketch of them may not be without interest.

After a striking change in disposition, showing itself in fretfulness and moroseness, has lasted some hours, patient begins to complain of violent pain in the right iliac fossa, which quickly increases, and radiates towards the epigastrium. When intense palpitations, precordial oppression, throbbing in the temples, singing in the ears, and pitiful whimpering have come on, patient suddenly turns pale, and with a

deep inspiratory sound, audible afar off, loses consciousness.

The hands, as though still seeking for something to lay hold of, now suddenly become motionless and tetanized, as well as the arms and legs. Soon the chin begins alternately to rise and fall; twitches are evident at both angles of the mouth, particularly the right; the eyelids vibrate; the extremities on the right side, and especially the arm, are the seat of short clonic discharges, while the left half of the body remains in tetanic stillness. Frothy saliva issues from the mouth; the face is cyanotic, the abdomen excessively tympanitic. As the difficulty of breathing diminishes, powerful, extensive, apparently purposive movements of the upper extremities come on, and are so violent that the hands, as a rule, are injured. Then the pelvis rises in rhythmical jerks, in such a way that for a moment the extended body only touches the bed with occiput and heel. Whilst these spasms continue, she begins to cry out, and abruptly to pronounce expressions and sentences—for example: "Thieves," "Shut the doors," "Money already stolen," "Chest's empty;" in short, expressions which plainly show that her morbidly-excited brain is the sceneof wild delirium, having the character of persecution, and reflecting itself in her face, from which fear and anxiety seem to speak.

Profuse weeping, violent hiccough, and return of consciousness, announce the conclusion of the attack. Her intense desire for a drink of water satisfied, she sinks into a shorter or longer sleep, from which she wakes perfectly well. Forcible and deep pressure on the abdomen in the right iliac region mitigates and shortens the attack,

without quite arresting it.

In the intervals between the attacks, similar pressure at any time, and without exception, gives rise to the before-mentioned aura.

I have intentionally avoided the use of the recognised terms, ovarian hyperæsthesia and ovarian compression, because it seems to me improbable, to say the least, for reasons it is needless to mention here, that the ovary in this case plays a chief part.

The patient thus presented the classical picture of aggravated hysteria, (so-called hystero-epilepsy of the French authors), with all its clinical symptoms, with complete hemianasthesia, which was all the more interesting from the fact that it co-existed with extreme motor paralysis of one extremity without contraction.

The patient was now subjected to metalloscopic experiments.

I wish to remark at once that she had neither heard nor read of metalloscopy, nor had any presentiment what the application of the metal plates might mean. It must be further mentioned that I naturally resolved to select such a method of experimenting, that, on the one hand, I was protected and secure against every fraud and illusion on the part of the patient, and that on the other, the powerful influence of imagination, of heightened attention and expectation, could be excluded. The cardinal importance of both these points needs not to be specially insisted on—everybody knows that, with the hysterical especially, the morbid inclination to create attention and awaken interest is a fruitful source of intentional and unintentional delusions and marvellous stories.

Thus, examples enough are found in illustration of the great power of imagination, and of the attention which is carried to the pitch of exaggeration—the "expectant attention" of English authors—in their normal physiological degree as well as in morbid proportions, as may be noticed in the not scanty literature of this subject; in connection with which I refer only to the newest, and certainly the most complete work of this kind by Hack Tuke.*

(To be continued.)

Case of old Nodule in Left Hemisphere. Dr. F. NEELSEN ("Arch. für Klinische Medicin," Bd. xxiv., p. 483). Contributed by Edward G. Geoghegan, M.D.

This case which is an interesting contribution to the study of the psycho-motor centres is an example of an old encapsuled nodule in the left hemisphere, resulting from a lesion in childhood, which destroyed the superior parietal convolution, and produced atrophy of the superior portion of the postcentral and para-central convolutions. The right leg was paralysed, but regained its function to a certain extent, while the right arm became completely useless. The paralysed extremities atrophied. There was atrophy of the right lateral and of the left anterior columns of the spinal cord. Descending degeneration of the pyramidal tracts.

This nodule was about the size of a cherry, and, in addition to the destruction of the above-mentioned gyri, had dislocated

^{* &}quot;Illustrations of the Influence of the Mind upon the Body in Health and Disease." London: Churchill.