they have never once been quite well. This is not the history of eczema. Canterisation with the acid nitrate of mercury is the only measure which does real good. Under it the patch on the neck has for some years been quite well, but that behind the ear still persists.

I cannot show you any good portraits of eczema-lupus, for the reason that it is impossible for the artist to portray anything distinctive. Everyone seeing the portrait would call it eczema. It is the history and the clinical course which alone make the diagnosis. I show you, however, three portraits which may be of some slight help. At any rate, they go to prove that the morbid action took on exactly the same characters in three different positions. The patient was a woman named Laura J., thirty-three years of age. She was of healthy family, except that her father suffered from "a breaking out on the skin." She had never had any symptoms of phthisis. As a child she had erysipelas of the leg. Her sister had scrofula badly in the neck, and possibly intestinal tuberculosis. The lupus disease commenced by a patch behind the ear; then followed patches on the left side of the bridge of the nose, and then in the left ear. About two months before I saw her she had a patch form on the right arm, which, after lasting a few weeks, almost wholly disappeared. In the right ear the whole of the concha was affected by a condition which it was impossible to distinguish in any way from eczema. It was ill-defined, slightly congested, and covered with thin scales, and showing several cracks. Behind the ears on both sides there were red weeping patches, which were tolerably well defined, and in that feature differed from the more common forms of eczema. There was also a very slight degree of thickening in the skin which was involved. The disease had been present for several years, and Mrs. J. had been under excellent specialist care in Liverpool. She believed that the word lupus had been mentioned. A cousin of hers was under treatment for lupus. The portraits are not very satisfactory, because the disease partakes more of lupus features than is usual in the pure eczema-lupus, and some may think that they resemble simply superficial and rather indefinite lupus. I believe that I saw the patient only once, and I cannot report anything as to the success of my treatment by cauterisation. It will be seen that the unsymmetrical arrangement of the patches in this case, all on one side of the head, suggested infection by contiguity, and the order and dates of their appearance confirmed it.

The last narrative which I shall trouble you with, is that of a remarkable series of three cases in one family.

A young lady, named S—, has been recently under my observation. Her case is an example of eczema-lupus, of an eruption which weeps like an eczema, but which persists and leaves scars like a lupus. It also shows the lupus process occurring symmetrically on the backs of the hands and nowhere else, and in companionship with a pustular and vesicular eruption on the fingers, repeatedly recurrent and probably allied to chilblains. Further, Miss S.'s case is an instance of lupus occurring as a family disease, for a brother and sister have it also. In her sister it is seen only on the hands, and keeps to the pustular form, but her brother has suffered rather severely from an acne-lupus on his face, and from lupus ulceration of his palate. I have already described his case, and it is one of the best examples of acne-lupus which I have seen. This tendency in three members of the same family to suffer from scar-leaving pustular eruptions on the face and hands, associates the disease, I think, with Hebra's xeroderma (Kaposi's disease). There is this difference, however, that whilst in the latter the disease shows itself in infancy or early childhood, it has not occurred till a much later age in any one of the family now in question.

The S. family are all delicate in the direction of struma, they are tall, well-made, and most of them of a clear thin skin. Miss S., the eldest, is now 22 years of age, of rather florid complexion, with brown hair and eyes. She considers herself in good health, her only trouble being the patches on her hands. She never had common chilblains on her hands, and never with any unusual severity on her feet. About the age of 6 she had scarlet fever, and after it became liable to have pustules and watery blisters form on her fingers. These would come and go without, so far as she remembers, any close relation to season or weather. On one occasion little blisters formed round her nails, and two of the nails subsequently came off. They were reproduced and are now perfect. Her fingers are long and taper, usually warm, and show no trace of capillary torpidity.

Four or five years ago, the patch which now gives her most trouble began to form on the back of the right hand. It varied much at different times, and would often get almost well, and then relapse again; its chief character being a weeping surface, with pustules at its margin. There is now a conspicuous scar, covering a considerable

area of the knuckles and back of the hand, and at its margin are some little dusky ill-developed pustules. Anyone looking at this scar and not knowing the history, would probably declare it to be lupus.

During the last four months, Miss S. has had a patch form on the corresponding part of the back of the other hand; this patch is now of about the size of a shilling, it is red, slightly raised and a little scaly. It is abruptly circumscribed, and would be taken for a patch of psoriasis. She asserts, however, that although at present dry, its usual condition is running moisture. It has been steadily increasing at its edge since it first began, and in spite of many applications. There is at present no proof of scar, but I have no doubt that it is destined to run the same course, unless we succeed in curing it, that its fellow on the other hand has done. I claim to regard them both as patches of lupus, assuming the external features of eczema.

ON SOME NEW APPLICATIONS OF THE INDUCED OR FARADIC CURRENT IN GYNÆCOLOGY.

By G. APOSTOLI, M.D., PARIS.

TRANSLATED BY W. WOODHAM WEBB, M.D., M.R.C.P.L.

THE gynæcological employment of the induced or faradic current is of French origin, and I may safely affirm that my friend Dr. A. Tripiér was the first to use it some twenty-five years since.¹

It is to be hoped that the new branch of therapeutics will, from the renewed interest it is exciting, soon reveal all its advantages.

A. Tripiér was the first to show that, owing to its contractile powers, the induced current could not only be used in obstetrics, but could be turned to good account in general gynæcology.

According to the views of A. Tripiér all, or nearly all, inflammatory conditions of the uterus arise from either an interstitial or an intra-vascular inertia of the muscular fibre. This inertia, mostly post-puerperal, deranges the circulation, causes congestion and stagnation, and a consequent arrest of the nutrition of the organ. By artificially exciting and re-establishing the circulation, he proposes to attain the double end of cure and prevention. Such is the rôle of faradisation indicated by A. Tripiér, when, in his teachings and practice, he insists upon it as the means of removing the congestion to which he traces the subsequent affections.

In a recent memoir² I have endeavoured to counteract these exclusive views of A. Tripiér, by pointing out what he had overlooked—the preponderating part played by septic influences in gynæcology. I demonstrated the primordial influence of lesions of the mucous membrane, showing that it was from them, by way of continuity, the parenchyma became implicated. I also showed that although the faradic current was all powerful in relieving the early and purely mechanical forms of congestion, as in cases of simple subinvolution, it was, on the other hand, useless in chronic forms, and in lesions of the mucous membrane, that is to say in endometritis. And this might be easily accounted for, since in inveterate conditions of the disease, the muscular fibre, compressed by the new deposit of connective tissue, partially disappears, and consequently the induced current, which is a direct excitant of muscular fibre, finds no sufficient material upon which to act.

On the other hand, when, as is so frequently the case, the mucous membrane only is at fault, it is still more evident that there is nothing upon which faradisation can work curatively. I, at the same time, directed attention to the powerful resource we have under these circumstances, in the methodical application of the continuous current, and noted the leading place it must take in future practice.

While giving attention to the action of the faradic current, I have done my utmost to extend the limits of its application beyond those which satisfied Tripiér.

I will now specify the contributions of this kind which I claim as exclusively my own.

1. I have modified the mode of application³ to which Tripiér has given his name. He had originated the unipolar excitation of the

¹ Hyperplasies conjonctives des organes contractiles. De l'emploi de la faradisation dans le traitement des engorgements et déviations de l'utérus et de l'hypertrophie prostatique. (*Comptes-rendus de l'Académie des Sciences*, Août 1850.) Leçons de clinique sur les maladies des femmes, par le Dr. Tripiér. Paris. Octave Doin, 1883.

² Sur un nouveau traitement de la métrite chronique, et en particulier de l'endométrite par la galvanocautique clinique intra-utérine. Paris, Octave Doin, 1887.

³ Sur la faradisation utérine double ou bipolaire, See *Union Médicale* 28 October and 1 November, 1884; also the *American Journal of Obstetrics*, September, 1881.

uterus, called utero-sus-pubic, in which the circuit was always closed upon the abdomen; for that, I substituted the bipolar method. I did this by using a sound, which contained the two poles side by side. It permitted the closing of the circuit within the uterus itself, while at the same time the current radiated sufficiently to act upon the whole muscular substance of the organ. By thus concentrating within the uterus the entire electrical action we secure the following advantages:—

a. There is less pain; the skin is not in any way injured as it may be when the current is closed above the pubes. b. It may be done more easily, as we get rid of the necessity of a cutaneous electrode, which requires holding either by an assistant, or by the patient herself. c. Being less painful the dosage may be increased. d. The effect is greater, as, other things being equal, the therapeutical effect is in proportion to the intensity of the current.

Simple, easy, and less painful, this method enables us, by using additional intensity, to expedite the curative effect.

My method of uterine faradisation is therefore uniform; it must necessarily be bipolar. Pregnancy is one of the rare hindrances to its employment. But, even in that case, as well as in some others I shall mention, vaginal bipolar faradisation may be used instead, and, although less efficacious, will be found of some service.

2. Next to the question of instrumentation, I claim as my second improvement in treatment the methodic and exact application of the faradic current of tension.⁴ This term "current of tension" requires a word of explanation. No apparatus for faradisation is complete without two independent bobbins, which, according to the length and thickness of the wires, give currents differing in qualities and characters. The bobbin with a short and thick wire gives that which is called the current of quantity, because the generating wire is less resistant and lets pass a greater volume of electricity. This current is the direct excitant of muscular contractility, and is the only one employed by Tripier to overcome muscular inertia, to produce a temporary vascular activity, and to carry out his treatment of uterine congestion. The other bobbin, with a longer and finer wire, is called the bobbin of tension. It gives a current which has, I may say, a much more considerable power of expansion. The current flowing from it acts less on the muscular contractility and influences the sensibility. It has therefore been employed especially when pain is the leading symptom, in order, by a contrary reaction, to deaden a too violent nervous vibration. This revulsive application on the skin is no novelty, though not sufficiently resorted to in gynaecology.

Now it is pain which leads most women to seek relief, and, if we examine the sources of this pain, we find that they are either inflammatory or nervous.

On the one side, then, we have to deal with uterine inflammations, and especially that class of peri-uterine inflammations which is usually so embarrassing; and, on the other, with a nervous condition which we recognise as ovarian pain.

It will be admitted that for these pains all the routine treatment is absolutely useless. No one can boast that by medicines he has ever permanently got rid of such ovarian pains, and the same may be said of the suffering from peri-uterine inflammations.

These problems are among the most pressing in gynaecology. Their gravity is made greater when the number of women is taken into account who are castrated on account of pains which we know can be removed by an electrical current. Such ovarian pain, as we meet with it in innumerable hysterical subjects, is nineteen times out of twenty curable, while the inflammatory pains can be often—I will not say always—mitigated in the same way. Now it is of this means of treatment that I consider myself the originator.

It was in 1883 that I first described, in a special memoir, my electrical treatment of perimetritis. I read a second paper on the subject at the Congress of Copenhagen in 1884.⁵

No other sedative, recognised in gynaecology for the purpose we are treating of, equals the faradic current of tension when applied in observance of the following rules:

a. Of these two applications, intra-uterine bipolar and vaginal bipolar, the intra-uterine will always be preferable as more active and efficacious, whereas the vaginal operation is forced upon us by such circumstances as the impossibility of passing a sound into the uterus. This will be our dilemma in pregnancy, in virginity, or in an acute stage of peri-uterine inflammation.

b. The length of the sitting is an essential condition of success. However prolonged, whether five minutes or twenty minutes, it ought

not to end till the pain has diminished or disappeared. This we can be informed of either by the patient's declaration or by direct contact. We should never interrupt an operation till we have clear evidence of this result. The needful duration of an application will vary not only in each patient, but in the same patient, during the course of her treatment. More time is generally required for the first sitting than for subsequent ones, in which we have only to complete the work begun. I insist upon this important fact, that though a case of perimetritis may only find relief from this treatment, the ovarian neuralgic pain may be, and generally is, done away with in a very short time.

c. The sittings should follow each other quickly. Every day, or even twice a day is not too often, so that the effect may be cumulative, and nothing of the benefit gained be allowed to subside.

d. The number of sittings necessary will always be uncertain. The nervous and inflammatory conditions we have to deal with are numerous and changing, while the treatment I advocate is especially directed against one symptom—the pain. The surgeon will be obliged to modify the treatment in every case. In simple neuralgies he will find from two to five sittings generally enough to secure the patient freedom from pain for several months, and even more. In case of relapse the same treatment will give the same results. With inflammations the case is different. Not even an approximate calculation can be made as to what will be required, since we have to encounter the difficulties of uncertainty of effect, and of deviations in the degree in which cases give way to the treatment.

e. As regards the operation itself, the dosage or intensity of the current to be used (as regulated by the sheathing of the bobbin) will vary within the known extreme limits.

First, in a case of perimetritis we must always be assured of the tolerance of the patient, only pass the current gradually and slowly, and above all, in acute cases, be content to use small—even very small—doses, increasing only as the power of endurance is developed and the phlegmasia shows a disposition to give way.

No pain ought to be inflicted on the patient, first, because it is useless, and, secondly, because too strong an application might do harm.

Great caution is always necessary, especially at the beginning of a sitting. First of all the bobbin should be entirely dismounted. Then starting from zero, the advance should be made millimètre by millimètre, while the eye is kept on the countenance of the patient, as the expression is the best indication of her sensations. The gentleness of proceeding must always be redoubled in acute cases of inflammation.

Secondly, on the contrary, in operating for ovarian pain, we may press forward directly and boldly to attain our end, provided the uterine region is healthy, as in that state it is extremely tolerant. A moderate dose will sometimes suffice, but generally it is necessary to go on to the highest point. Though in perimetritis we must avoid causing any suffering, it may here be well, as a slight dose would do no good, sometimes to rouse the uterus by pouring in a massive current of tension. It is clear from all this that the dosage will always be variable, and require delicate adjustment, by a tact which can only be acquired by practice.

Even my experience, with many hundreds of these cases, does not empower me to lay down any directions which will suit all conditions. I can only say that, having to do with a curative agent which is under control, it must be judiciously adapted to the circumstances.

If, however, the dosage of current is a personal affair as regards the patient, there are some general indications which may be useful in guiding the practitioner.

It is a peculiarity of the greater number of hysterical women that they bear easily the faradic currents of tension, even with the fullest dose; so well, in fact, that after a short time they will affirm that they feel nothing. A novice might thus imagine that his apparatus had failed, or that there was an interruption of the current. When such insensibility shows itself there need be no hesitation, and we may after having slowly passed the bobbin home, continue to use the highest intensity.

But, on the other hand, we find a few women in whom there is a complete contrast of sensibility. They are incapable of submitting to the current even in small doses without complaint. Here we should be very cautious in toning down the current to their power of endurance.

I have observed this interesting fact in dealing with the still rarer cases of complete insensibility to the current of tension. They seemed not only to be able to bear it, but to be unconscious of any action. Under such circumstances, as an exceptional proceeding, after having first tried the effect of the current of tension, I have changed it for that of quantity. This generally tells upon patients more and more

⁴ Sur un nouveau traitement de la douleur ovarienne chez les hystériques. *Bulletin Général de Thérapeutique*, June 15, 1885.

⁵ Sur un nouveau traitement électrique des périmétrites. *Comptes-rendus du Congrès de Copenhague, Section d'Obstétrique et de Gynécologie*, page 141.

markedly as the hysterical symptoms are more prominent. The following curious phenomenon then presents itself: immediately the current of quantity is substituted for that of tension, it is found that the intolerance of even the smallest doses is such as to threaten the patient with a nervous paroxysm. This is the point at which to manifest the tact of medication. A state of calm only comes on when we have artificially brought the woman to the verge of a hysterical outburst by an intentional *brusquerie* of faradisation. At this moment there must be a pause, and a gradual cessation of the current. The threatened crisis will be checked, and a condition of tranquil relaxation takes its place. At the same time the ovarian region loses all, or almost all, its previous sensibility, and it is found that even when that sensibility had lasted for years, and been such as to render the slightest touch insupportable, there is, within the space of a few minutes, a transformation so complete, that the woman is indifferent to ordinary pressure.

Nevertheless, it must be borne in mind that, though this pain is called ovarian, its real seat is in the ovarian plexus, which lies above the ovaries, so that the spot where pressure causes most pain is considerably higher than the pubic margin of the pelvis, and away from the median line. This point, which, before the sitting, was exquisitely tender, will, after it, allow of any reasonable pressure. The woman will remain calm and free from any abnormal sensation, provided the source of pain is not irritated, and the corresponding ovary is not compressed by the fingers, used in a bimanual examination, by touch and palpation.

I may, therefore, thus state my opinion that hysterical ovarian pain, not having origin in any structural lesion, may in general be allayed, and that the patients have no further ground for complaint. In this state pressure above the pubes causes no discomfort. But the proof that the cure is not absolute, and that the cause of the suffering has not been removed, is that the calmed pain may be again aroused by pressure between the fingers from within and without, and that, even after a long interval of freedom, there may be a relapse.

3. I now mention my third and last contribution to gynaecological therapeutics.

There are many women who, independently of ovarian neuralgia, have intense and very localised sensibility about the entrance and lower part of the vagina. These are cases of imperfect vaginismus, in which the torment is so unbearable, and the hindrance to connection so complete, that life is rendered miserable. The difficulty of overcoming this trouble is only too well known. I have had to do with a large number of interesting and instructive instances of this affection, and I intend to publish a full account of the most important. For example, in one woman I found a single neuralgic spot, not larger than the tip of the index finger, just at the end of the right nymphæ. Another had the same condition exactly at the posterior commissure. In a third, the excessive sensibility was confined to the orifice of the urethra. The fourth case had a similar neuralgic area on the left side of the vestibule. Besides these single spot cases, I have seen many others in which the localisation was not single, and the extent varied. The remedy of which I have availed myself, and now recommend, for ridding women of these harassing annoyances is the faradic current of tension, well and methodically applied.

Over and above the general rules which I have laid down as to the dosage, duration, and mode of application of the current, which hold good equally in these cases, there is a fourth special indication that must be regarded as obligatory.

Uterine faradisation alone, by reflex action, may possibly effect a cure, without any immediate contact. But such a result is exceptional, and, as a rule, the electrical action must be brought to bear directly on the point concerned. The maximum of effect must be concentrated on the seat of pain under touch. To insure this result, I have designed an instrument, the conical end of which contains the two poles side by side, but separated by an isolating layer of gutta-percha. (See Figure.)

That which I have previously advised should be done to the uterus in certain conditions with my bipolar sound, may be effected here with my bipolar electrode.

If, however, the vaginal neuralgia is "deep-seated, and extends over a large segment of the vestibule, this instrument will not answer, and we must replace it by a large bipolar sound, with which a double vaginal faradisation can be made, taking care, when the outer orifice is the part implicated, to rest the exterior pole upon it.

This will serve as a brief exposition of my views as to some applications of faradism in gynaecology. I look upon it as effectual in hysterical neuralgia, useful and variably sedative in the pains of inflammation. It is true that hysteria holds a large place in this medication; and it may be objected that, after all, suggestion has a great deal to do with the effect produced. Cure is admitted, but, in such cases, the question arises: may it not be brought about by the mental impression made by the operator?

This explanation I reject. Among many other proofs that it will not suffice, this is enough: that you may faradise one of these women, without saying a word to her either as to the nature of the treatment, or as to the probable changes that may be the consequence, and the results will be the same as if you had forewarned her.

Moreover, all suggestive influences, however potent they may be in other circumstances, are put out of question by the fact that faradism only relieves when we observe certain fixed and precise rules in its application.

EXTRACTS FROM AN ADDRESS

ON COLLEGE POLITICS: MATTERS CONCERNING THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Delivered before the South-Western Branch of the British Medical Association, December 15th, 1887.

By PAUL SWAIN, F.R.C.S.,

Fellow of King's College, London; President of the Branch.

GENTLEMEN,—The aim and object of those who desire to reform the present mode of government of the Royal College of Surgeons is that it should no longer be a close corporation, managed well or ill by twenty-four gentlemen wholly irresponsible to the great body of the profession, and whose actions it is impossible effectually to challenge. The College of Surgeons has at its command a very large revenue; last year its total expenditure amounted to no less a sum than £33,629 11s. 7d., leaving a balance in hand of £1,742 14s. 7d. I do not for the moment stop to inquire whether this large sum is spent rightly or wrongly; but I ask you if you think it proper that the expenditure should be committed to twenty-four gentlemen who, however learned they may be in their profession or estimable in their private capacities, are not, that I am aware of, selected on account of any particular business aptitude, and who spend the money in the happy security that their actions cannot possibly be challenged by any single individual of the great profession, out of whose pockets the principal income is derived, and for whose benefit the expenditure is supposed to be made? The Council are apparently becoming afflicted with a distressing mania for building, and I see that the sum of £11,852 11s. 9d. has been spent on the new Examination Hall. They are also embarking on a large building plan for the extension of the College itself, the cost of which is to be eventually £53,700; and furthermore, at an extraordinary meeting of the Council on June 27th, the following resolution was carried, namely, "that for the present this Council do not spend more than £50,000 of the Erasmus Wilson bequest"—also to go in bricks and mortar. Verily let us be thankful for this small mercy for the present.

The Court of Examiners consists of ten members, who are elected by the Council by ballot. They hold the office for five years, and may be re-elected. They must be Fellows of the College; and being members of the Council does not disqualify. Last year the fees paid to the members of the Court of Examiners amounted to £5,219 2s. At a meeting of the Fellows and Members, held at the College in October, 1886, I alluded to the question, and showed that it was not only possible for the members of the Court of Examiners to be in a majority on the Council, but that such had really been the case, and that, too, in the face of a resolution of the Council that not more than one-half

¹ I would call your attention to an able criticism of this expenditure in a leading article in the JOURNAL of October 22nd.