THE PSYCHIC AND NERVOUS INFLUENCES IN DISEASES OF WOMEN.

By HORATIO R. BIGELOW, M.D.

I WISH to emphasise with some force the distinction between the psychic or super-cerebral force and the chemico-molecular action, which is the expression of nervous energy, in the causation of many of the ills called gynæcological. The nervous energy may be directly objective, as alone concerned, without appealing to a higher agency; or it may be subjective, acting simply as a common carrier, transmitting its message of woe, and waiting for the ultimate order. The psychic exaltation or depression, generally speaking, merely calls forth a perversion of function; while the disturbed nervous energy, including trophic and vaso-motor changes, may occasion organic lesion. To regard the female pelvic organs as isolated points, without direct connexion with the whole bodily economy, is not a common heresy, but it is a danger that threatens, and gains ground the faster that gynæcologists absorb themselves with one branch of scientific medicine to the exclusion of all the others. He would be a poor physician who should forget the relationship of liver and stomach to cardiac disease, and he an equally unscientific gynæcologist who would castrate every hysterical woman. Surely the indefinable super-physical expression of a force that makes the physical weakling a hero in the battle of life; that radiates from itself a will so iron that even the strongest have been known to quail before it; that from a bed of suffering can create and originate; that can control a household or a community—surely such a power as this demands recognition in all of the processes concerning it. It makes no difference in the ultimate purpose of this paper whether we look upon the will as the *final* action of many separate cerebral departments—a desire or aversion sufficiently strong to generate action; or whether we look upon it as a material entity whose freedom is assured by the divine fingers that attune it,—the fact still remains that the psychic force, however manifested, must always demand consideration from the specialist. The autocracy of such a monarch cannot be disputed, and his messages, borne on the wings of his fleet-footed messengers—the nerves,—will set many an intelligent physician to patient thinking. All specialism is dangerous in proportion as it becomes exclusive or seeks to narrow a wide and general field of intelligence. No one can hope for success in any specialty unless he is intelligently instructed upon the salient features of other specialties. And perhaps in no other calling so largely as in gynæcology is it necessary to be acquainted with the subjective life of woman. What are her thoughts, her hopes, her aspirations? How largely is she given to introspection? How firmly and in what manner is her ideal building? Then we must know of her objective necessities in æsthetics and social graces, and train ourselves in the many little things that go largely into the make-up of womanly comfort, and which will gain the patient's confidence in the proportion in which we embody them in our actions. So much by way of preface. We now come to something practical, although after that has been said the necessities of the subject must drift us back again to theoretical reasoning.

The nerves with which the gynæcologist must concern himself are—the plexus solaris or celiacus; the plexus mesentericus, superior and inferior; the plexus aorticus abdominalis; the plexus hypogastricus superior; the plexus spermaticus; and the plexus hypogastricus inferior, between the floor of the bladder and the rectum. From the cord (from the plexus lumbalis) we have the nervi ilio-hypogastrici, ilio-inguinales, genito-crurales (a favourite seat of neuralgic pain); the plexus and ganglion at the cervix (described by Frankenhauser and Jastrebow); the nuclei terminations in the unstriated muscle of the uterus (Frankenhauser); the ganglionic terminations in the mucous membrane, and the end bulbs in the clitoris and vagina. The vagina, uterus, Fallopian tube, and ovary are supplied by filaments from the inferior hypogastric plexuses. The muscles receive supply as follows: the levator ani and sphincter ani by the inferior hæmorrhoidal branch of the pudic, fourth and fifth sacral, and coccygeal nerves; the coccygeus by the fourth and fifth sacral and coccygeal nerves; the muscles of the perineum and clitoris by branches of the

pudic nerve. These are they, then, which give rise to those immediate reflex neuroses with which the gynæcologist has to do. Other nerves there are, of equal importance, giving origin to reflex symptoms equally distressing, and with which he should make himself acquainted; for palpitation of the heart, nervous dyspepsia, spasmodic contraction of the gall-bladder, or migraine, will not disappear coincidentally with the righting of a dislocated uterus, with the sewing up of a lacerated cervix, with the extirpation of an offending ovary, or with the healing of an endometritis.

In losing sight of constitutional causes as factors of local disease all special erudition and all clever handiwork will be in vain. Many ills to which women are liable are merely *symptoms*, and they will never cease their direful work until intelligence looks deeper and attacks the exciting cause. It will not be one particle of service to attack a retroverted uterus with pessaries (a refinement of torture and of unscientific deduction of this nineteenth century) in a highly nervous woman, whose trouble rests not with her womb, but with her "run down" condition generally. I will go a step further, and assert that rest, good diet and regular, electricity, massage, and Turkish bathing (when indicated), with wholesome psychic surroundings, will, in very many instances which receive nowadays only local attention, accomplish more permanent and real good than any special interference. Vastly more harm than good has resulted from the happy-go-lucky way of applying pessaries, and quite as much evil comes from the brusque way we have of relegating all womanly suffering to pelvic derangement, and then rushing blindly at that, irrespective of the shock we may occasion to a highly modest and sensitive woman. Liebermeister asserts that this *nervosität* is due to a disease of the grey substance of the brain which depends upon a derangement of the lower brain function, as contra-distinguished from the true disease of the brain, which is due to a disturbance of the higher psychic function. Convinced in my own mind that Liebermeister is right, I should seek to improve every detail of the woman's environment, subjective and objective, before resorting to local interference; of course I mean in those instances in which the local trouble is purely secondary. "Run down" women, women with all sorts of anomalous aches and pains, women given to morbid introspection although they may have some pelvic pathological condition, demand first constitutional handling, and we simply intensify every bad symptom by ambitious specialism. Rheinstædter¹ says: "I have never yet done a castration for *nervosität*, and I intend never doing so in the future. How can we hope to cure a brain disease through castration? Why do we not castrate men for nervousness?" The radical operation of oöphorectomy in case of neurasthenic hysteria (and I mean by this an hysteria which is clearly due to nerve exhaustion) is *never* indicated, neither can it ever be indicated in pure neurasthenia. In pure hysteria it is only justifiable when the exciting cause can be clearly and absolutely located in the ovary beyond all question of a reasonable doubt, and even then it should never be thought of until we have exhausted all the means of conservative treatment which recent investigation has placed within our reach. It seems to me that the clear indications for so dangerous an operation are so very small as to be almost *nil*, and I am convinced that many cases on record so operated upon would have gone on to a wholesome recovery under strict conservative treatment, as we realise and recognise it to-day—a treatment that requires boundless patience both from patient and physician, but which accomplishes its purpose surely and almost insensibly to the woman, until she finds herself carrying out the daily duties of life as most women do, and with the same measure of comfort. A woman's mind has much to do with her general condition, and herein lies the secret of the rest treatment. With a mind at absolute rest, with no thought of the morrow to conjure up the fiend of ways and means, with a complete realisation of the *dolce far niente*, we have at hand a more potent medicine than any sent out from drug stores. And I know, because what I have seen I believe, that under such rational handling many gynæcological cases go on to recovery without any local interference. Of very especial value is rest treatment, because it enables the physician to discipline the disorganised will, and to bring it into harmonious relationship with the other bodily functions. Hysteria disappears at once under an organised, well-sustained moral discipline. The nervous condition,

¹ Praktische Grundzüge der Gynäkologie. Berlin, 1886.

which is the underlying cause, is one of exaggeration, congestion, and exhaustion, and these all disappear upon proper hygienic observances, conjoined to will training. The weakened will itself is but part and parcel of the whole nervous disorganisation, and will regain its normal standard as soon as the other functions return to a physiological basis. The nerve-supply of the female pelvis is not a distinct and isolated department, but intimately connected with the whole nervous system. So that disorganised function anywhere, but the more especially in the brain and spinal cord, may transmit its influence to the ovary. If we admit the possibility of "maternal impressions" stamping themselves upon the foetus in utero, we must also admit that certain states of consciousness can impress themselves upon and be felt within the uterus. This premiss seems reasonable by virtue of the direct connexion between the mucous membrane of the uterus and the chief mucous centres. Clinical evidence of the influence of the brain upon the uterus is ample. A prolonged unhealthy nervous influence would set up a correspondingly unhealthy action in the organ reached and affected by it. Not only directly through the filaments and ganglions, but also by its effect upon blood-supply, will any derangement of nervous function be sensibly appreciated by other and remote organs. Either congestion or anæmia may result from prolonged states of cerebral excitement or exhaustion. Arterial tension hinges largely upon states of consciousness, and menstruation, which is one of its expressions, is always regulated by the nervous condition of the woman. I am not at all sure but that many of the changes in the endometrium that occasion thickening, hyperplastic proliferation, tumour growths, and malignant hyperplasia of the uterine glands are due first to nervous influences, subsequent congestion, and generally altered blood-supply. If this be so, we should address ourselves first to a normal rehabilitation of nerve and bloodvessel, and then seek to eradicate any local condition which would interfere with such treatment. Gynæcology has handicapped itself with excess of detail, and, like all specialties, its field of vision is limited. The success of a few, who do little or nothing else, has created a surgical epidemic, and whole communities rush headlong into a *strom*, where experience is partially learned at the cost of hundreds of lives sacrificed. These habits of thought and medical crazes revolve in certain well-known cycles. Already there is the faint flutter that precedes the coming storm. We are on the eve of a change in gynæcological practice, in which the scalpel will be the bar sinister and conservatism the crest and crown of our special coat of arms. Define the limits of abdominal surgery to its narrowest confines, and then let those only practise it who are educated to it and who devote their lives to it; no others have the right to place a human life in jeopardy. I have said that there are countless instances on record, where special surgery has failed to relieve general symptoms, and of these ailments none is more common than neuralgia of the trigeminus nerve, or so-called migraine.² The cry of the trigeminus is the echo perhaps of the uterine wail, they both ache synchronously with the pathological pain of the central system, which is labouring to carry out its daily routine under unnatural effort. The migraine and the "pain in the side" (ovarian) are merely symptoms, and can be best reached, and only reached, so far as I know, by constitutional treatment. You will not cure the migraine by extirpating the ovary, and you will not cure the ovary-ache by resecting the trigeminus, even were one bold enough to attempt it. One operation is about as sensible as the other. Take the complex symptomatology of oöphoritis (a most vague term, rather a cloak of ignorance than the expression of scientific pathology), with its pain in the side, leg-ache, dyspepsia, intra-menstrual peritoneal pains, and spasmodic action of the gall-duct setting up an appearance of icterus. What are we going to do about it? The ovary is suffering no more as a primary cause than does the aching tooth of a pregnant woman act primarily. The tooth does not ache from the presence of a cavity, but from sympathy. Now, shall we turn the woman's stomach into an apothecary's shop, dosing her specifically for each disordered function, combining this with the routine local treatment; or shall we go to work and find out what makes the ovary ache, and then treat the cause? In a rare percentage of cases I will admit that the terminal filaments from the inferior hypogastric plexus within the ovary, have, for some reason unknown to us, taken on diseased action, and have so transmitted

their plaint. But such instances are rare, and when they do occur there must be some reason for the nervous and vascular changes. That reason cannot rest within the ovary itself, but it does rest in the chemico-molecular changes in the vessels sustaining its life. It may be objected that the train of symptoms that I have cited belongs to catarrhal salpingitis, with enlargement of the ovary, but I only say that which I know, and that which I have seen I take as evidence of anything that I adduce. Simple tubal disease, non-specific in the nature of its discharge, *does not call for the operation of Hegar*. Gonorrhœal salpingitis, when recognised, can be treated first by dilating the tube with a catheter. If that fail, and the woman's condition is so unbearable that she demands it, then Hegar's operation is justifiable, but not until the full line of treatment which I have often suggested is first given a fair trial. There are a certain number of gynæcological cases which will always demand the skilled hand and clever brain of the surgeon; but the number is not as large as is generally supposed, while the surgeons multiply with wonderful rapidity. I am sure that before long our whole process of combating diseases of the endometrium will undergo radical change, for there cannot be inherent potentiality in the mucous membrane of the uterus to originate so many complex conditions. When we have once found out the true nature of this mucous membrane, when we know surely the rôle it plays in menstruation, we shall then arrive at a knowledge of the prophylaxis, patho-anatomy, and etiology of uterine myoma. Even now we are finding out that many uterine myomata will yield to conservative treatment which gynæcology until very lately maintained should be cut out.

Leipzig.

EXCISION OF THE LARYNX.

By W. GARDNER, M.D., C.M. GLAS.,

SURGEON TO THE ADELAIDE HOSPITAL, AND LECTURER ON SURGERY IN THE ADELAIDE UNIVERSITY.

JAMES M—, aged sixty, shoemaker, living in a small suburb of Adelaide, was sent to me by my friend Mr. Corbin as a probable case of malignant disease of the larynx, with a request that I would examine him, and do what I could to rid him of his trouble. On Oct. 9th, 1886, I admitted him to the Private Hospital. For the following notes of his previous history and present illness I am indebted to my assistant-surgeon in the Adelaide Hospital (Dr. Ainstey Giles).

"The patient has been a healthy man all his life, and has never suffered in any way except from an occasional cold. He has always been engaged in the same trade, and has not suffered from syphilis or been exposed to hardships of any kind. His father died at the age of eighty, and his mother at forty. He does not know the cause of death in either case. His grandmother (paternal) died at the age of ninety. There has been no disease of an hereditary nature in the family. Two years ago he lost his voice entirely, and it has never returned. Previously to losing his voice he suffered from no throat affection of any kind. The voice gradually became weaker, till at the end of about four months he could not speak above a whisper. He continued in this state until four months ago, when he began to experience a sharp gnawing pain over the larynx, for which he was treated in various ways, but without the least improvement in the conditions. He has had a long course of iodide of potassium, with no result. With the increase of pain he has been rapidly losing flesh, feeling very weak, and during the whole period (four months) has been unable to rest at night on account of the pain, which wakes him up continually. He never had any night sweats. He can take food fairly well, but has no appetite, and swallowing causes slight pain. There is no absolute aphonia."

On laryngoscopic examination both true vocal cords were found to be ulcerated away in nearly their entire length. Irregular white papillomatous nodules were projecting into the centre of the larynx from the sides immediately below the glottis. The false cords and the mucous membrane above were very much inflamed and bulged out by a solid growth underneath, more marked on the right side than on

² See Möbius, Berl. Klin. Wochenschr., 1884, Nos. 16, 17, 18.