Lectures

ON THE

DIAGNOSIS AND TREATMENT OF DISEASES OF WOMEN.

DELIVERED AT ST. MARY'S HOSPITAL MEDICAL SCHOOL.

BY

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GENTLEMEN,—In accordance with the plan proposed, I now proceed to the regular and systematic consideration of the data, by comparison and proper estimation of the value of which we are enabled to arrive at the diagnosis. The data obtainable without physical examination of the patient will first engage our attention.

The fact which naturally comes first before us, as one of the elements or data in question, is

THE AGE OF THE PATIENT.

The deductions to be drawn from the mere fact of the age of the patient are not very numerous or very decisive, but they have their importance. Particular diseases are not always limited to certain ages; yet the range of age within which a certain disease is in the habit of showing itself is for the most part constant—sufficiently so, at least, to enable us to lay down general rules in reference to the *diagnosis*.

The *treatment* to be pursued must always be very much modified by the age of the patient. There is this very important fact always to be kept in view, that the condition of the woman is a very different one during the period when the sexual organs are in a state of activity, and after that period of activity has come to an end. Moreover, it is a fact that, whereas during the period of sexual activity a certain morbid physical condition of the generative organs may be attended with serious inconvenience, after this period is over the symptoms and inconveniences arising therefrom may undergo such abatement that treatment is very frequently quite unnecessary. There are often cases in which, for this reason, we anxiously await the arrival of the period of "sexual involution", as it has been termed, as a time when the condition of the patient may undergo a favourable change. It is sometimes a question whether the disease shall or shall not destroy the patient before this, the desired haven, has been reached. So far, then, it will be evident that the age of the patient may form a very important and essential element in the considerations, on which our decision as to the propriety or utility of particular methods of treatment may rest.

The more important conditions or diseases in the diagnosis of which the age of the patient may be a material question will now be considered.

Pregnancy. Between the ages of fifteen and forty-five—in this country, at least—fecundation occurs; and where child-bearing takes place before this period, or subsequent to it, the case is to be regarded as exceptional. It is important, however, to be aware of the extreme limits within which the occurrence of pregnancy may be considered possible.

It is necessary for the moment to consider pregnancy apart from menstruation; for although, in the large majority of instances, the period during which the woman is liable to pregnancy coincides with that during which menstruation is observed to take place, it is not always so. Many facts available for the determination of this question—within what limits is pregnancy possible?—will be found in Dr. Montgomery's well known work, and also in Dr. Tanner's more recent treatise. The chief of these facts, however, it may be well to mention.

The *earliest* substantiated case in this country is probably that recorded by Mr. Robertson, in which pregnancy commenced in the eleventh year; another is *said*, by another authority, to have occurred in the ninth year. In a case cited by Dr. Montgomery as having been observed in the United States, pregnancy took place in the tenth year. Dr. Goodeve of Calcutta reports that the earliest age at which he had known a Hindu woman bear a child was ten years; he had heard of one at nine. The experience of Dr. Montgomery himself did not furnish him with an instance in which pregnancy commenced earlier than the fourteenth year.

The *latest* age at which pregnancy has been observed in this country is fifty-four. The number of cases of pregnancy after the age of forty-five is, however, small. Thus, of ten thousand cases observed at the Manchester and Salford Lying-in Hospital, by Mr. Robertson, only fifty-one were over forty-five years of age; the distribution of these being as follows:—

In the 46th year, 12 cases	In the 50th year, 9 cases.
" 47th " 13 "	" 52nd " 9
" 48th " 8 "	" 53rd " 1
" 49th " 6 "	" 54th " 1*

In France, the possibility of pregnancy at the age of fifty-eight was decided judicially in one case. In this country, in respect to an important case decided in the Court of Chancery, no evidence could be brought forward to the effect that pregnancy at the age of sixty was possible. Dr. Montgomery declares that no case of pregnancy has occurred, of the particulars of which he has reason to be satisfied, at an age later than the fifty-fourth year; but this able authority goes on to state that he "by no means pretends to deny the possibility of such occurrences". Recorded instances of late pregnancy it is right to mention. Thus Devergie quotes a case of pregnancy at fifty-eight. Casper (*Handbuch der Gerichtlichen Medicin. Biologisch. Th.*, Berlin, 1858, page 104) cites the case of Marsa, a physician in Venice, who treated a woman aged 60 for dropsy, which proved to be pregnancy. Capuron cites a case of pregnancy at sixty-five.

The cases in which it is especially necessary to be aware of the possibility of the existence of pregnancy are those in which a long term of married life has passed over without conception having taken place; the woman has arrived at a "certain age"; and the mere fact of her having remained childless, either altogether or for some time previously, tends to put the practitioner off his guard. In addition to this latter circumstance, the other signs of pregnancy have occasionally been found absent in these cases of pregnancy at an advanced period of life. In a remarkable case occurring in Dr. Montgomery's

* Robertson "On Physiol. and Dis. of Women," etc., p. 188.

practice, the patient first became pregnant in the twenty-fifth year of her married life. In another, pregnancy took place seventeen years after a former delivery. Van Swieten records a case of pregnancy after an interval of twenty years; and Dr. Merriman another in which the interval was of equal length. It appears that pregnancy may even occur after the catamenia have ceased, and where there is, for this reason, an additional motive for deciding against the possibility of pregnancy, as in a case of Dr. Merriman's, also quoted by Montgomery.

All these facts are sufficient to show that, within certain limits, neither the advanced age of the woman, or this combined with the circumstance that she has arrived at this age unfruitful, or has remained unfruitful for a long series of years, are sufficient to exclude pregnancy from the consideration; and, in a doubtful case, other data must be sought for before the decision can be arrived at.

Procreative Age in the Man. There are two parties necessary to the production of pregnancy; and it becomes necessary, therefore, to determine the limit within which the man is capable of fertilising the woman.

In the case of the man, no such exact limit can be placed on the duration of sexual power. Müller remarks, "The duration of the reproductive power in man cannot be so exactly defined. In general, it continues longer than in woman; and not unfrequently very old men manifest a remarkable degree of virile power. (*Physiology*, Baly's transl., p. 1488.) Cases are on record in which men who have attained to the ages of 81 and 83, and have at this advanced period of life become fathers; and the often quoted instance of "Old Parr" must not be forgotten, who, it is stated, did public penance for misbehaviour, of which he was "capable", when over a hundred years old. (Montgomery, *op. cit.*, p. 321, 2nd ed.)

It must not then be hastily conceived that pregnancy is impossible because of the advanced age of the husband; nor, on the other hand, if it be proved on other grounds to be present, must the wife necessarily be considered unfaithful because the husband is old.

As a circumstance also having some relation to a possible view of a particular case, it is worthy of remark that a very considerable degree of debility or disease in the man is not incompatible with the existence and exercise of procreative power.

Cancer Uteri. Cases of uterine cancer are noticed, for the most part, after the age of 30. The larger number of cases occur between the ages of 40 and 50, and about 1 per cent. of recorded cases occurred after the age of 70.

Before the age of 25, then, uterine cancer is a rare disease. Dr. Churchill states that he has witnessed a fatal case in a woman under 25; and the same authority refers to two other cases—one by Wigand, in which the uterus was affected with scirrhus at the age of 14; and another by Mr. Carmichael, fatal at the age of 21. In Madame Boivin's table, twelve cases out of 409 are set down as under 20 years of age; but these cases of early cancer related by Madame Boivin are objected to by recent authorities, as not being cases of cancer at all. The youngest of Scanzoni's cases was 23 years old.

The opinion of the best observers—of Dr. Walshe and Mr. Paget and others—is, that the proclivity to

cancer generally increases steadily and progressively with the age. It is to be remarked that, after the age of 50, the frequency of cancer uteri appears to diminish; but the diminution is rather apparent than real, for it must be remembered that the proportion of individuals living, and therefore available, so to speak, for cancer, becomes less and less.

Mammary Cancer. The period of life most of all liable to this disease is that between 45 and 50. Of 158 cases referred to by Mr. Paget, only two cases occurred between 20 and 25, and forty between the ages of 45 and 50. The disease has been seen but very rarely before puberty. Hence the probability of a tumour of the breast turning out to be of a cancerous nature is small if the patient be less than 25 years old, but after that age it becomes more and more to be feared until after the age of 50.

The above observations refer to scirrhus or hard cancer of the breast. Mammary cancer of this organ is so rare that, according to Mr. Paget, only two cases have ever come under the notice of Mr. Lawrence.

Cauliflower Excrescence of the Os Uteri, a disease not very common, may be observed, according to Sir C. M. Clarke, at all periods of life after the age of 20. This author mentions a case fatal at the age of 20.

Fibrous Tumour and Fibrous Polypus of the Uterus. There appear to be no sufficient grounds for separating these two lesions; and the more so, as they resemble each other not only in their intimate structure, but in respect of their frequency at different ages. The particular period of life in which these growths have been observed is that during which the uterus is in the highest degree functionally active.

Scanzoni considers that the fibrous tumour of the uterus is most common between the ages of 35 and 45; but of seventy-six cases tabulated by Dr. West, eighteen cases occurred between the ages of 20 and 30.

The *symptoms* of the two diseases were observed by Dr. West in forty-six cases, in reference to the time of their commencement; and it was found that in one case they began under the age of 20, while in eight cases they began between the ages of 20 and 30.

It is highly probable that the fibroid tumour of the uterus is very frequently present in cases where its existence is not suspected; for, in certain positions of these tumours, the symptoms are not such as to attract particular attention. For this reason, we may perhaps be justified in presuming that the frequency of the disease before the age of 30 is not indicated in most tables given on this subject. The statement of Bayle, to the effect that the fifth part of women above 35 years old are affected with fibrous tumour of the uterus, does not appear to be borne out by more recent pathological inquiries. The disease is of frequent occurrence, undoubtedly; but the case is overstated by Bayle.

Diseases of the Ovaries. Ovarian cysts containing hair and fat, with or without bones and teeth, are not very uncommon, according to Kiwisch, between the ages of 6 and 10; and they may, of course, be found present at later periods. The same author states that the medullary and the alveolar are the only forms of cancer of the ovaries which are met with in the early period of life. The practical de-

duction from this is, that if ovarian disease be met with before the age of 18, it is more likely to be of malignant character than when ovarian disease is detected in a patient over the age of 20. With the maturation of the ova and enlargement of the Graafian follicles, coincident with the advent of puberty, arises the liability to that form of disease of the ovaries known as *encysted dropsy*. The disease in question occurs with greatest frequency between the ages of 20 and 40.

From Mr. Clay's valuable collection of statistics on ovariectomy we find that ovarian tumours were removed in two cases at the age of 17, in four at the age of 18, in five at the age of 19, in ten at the age of 20, in a given number of 281 operations; while in thirteen cases the age of the patient varied from 55 to 60, and in four cases the patient was over 60 years of age. The remaining cases were spread over the period between the ages of 20 and 55. The age at which the disease commenced was, of course, earlier by at least a year or so in all these cases. Dr. Ashwell and Kiwisch reported each a case in which the disease began at the age of 14, and pathologically, the disease has been observed in infancy.

Such are the chief facts in relation to the age at which the diseases or conditions mentioned may be expected to be observed.

SEXUAL RELATIONS.

From the facts concerning the sexual relations of the patient we may derive some useful information, and some assistance in our first attempt to make a diagnosis.

Statistics show that *cancer of the uterus*, one of the most formidable of the diseases to which the female generative organs are exposed, is far less common in *single women*. Thus, of 118 cases cited by Dr. West, only two occurred in unmarried individuals. According to the best authorities, also, single women are not so prone to *ovarian cystic disease* as married. Dr. Ashwell, it must however be mentioned, was of a contrary opinion.

But, on the other hand, there are certain diseases to which single women (understanding by this term those not indulging in sexual intercourse) appear to be more liable than the married. Thus Safford Lee states that "*tumours of the uterus* are more frequently observed in virgins and those who have never borne children than in the married". Dr. Lever considered *polypus uteri* to be more frequent in the former than in the latter, in the proportion of seven to three. Single women are also more liable than married to *hysteria* in all its forms.

Encysted dropsy of the ovaries, as already remarked, is more frequent in married than single women; for, of 136 cases in which this disease existed, S. Lee found that 88 were married, 11 widows, and 37 single. It seems probable that the greater prevalence of this disease in married women is connected with that inordinate growth and development which take place in the various structures of the ovaries during pregnancy, or in consequence of the increased flow of blood to these organs during the sexual orgasm. A very striking instance of the result of continued and sustained fullness of the nutritive vessels of the ovary is presented to us in the corpus luteum of pregnancy.

In women who have borne children, we expect to meet with peculiar conditions not observed under

other circumstances. The fact that the patient has had children leads us to look for certain alterations or diseases which are not met with under other circumstances. Many of the disorders and derangements with which we have to do are connected more or less directly with this circumstance. After the uterus has expelled its contents, the period of uterogestation having expired, the return of the uterus to its proper size is frequently delayed for a time, and this organ occasionally remains large and unwieldy for a longer or shorter time. The consequence of this is, that the position and the shape of the uterus are liable to undergo certain changes, these changes having for their effects grave inconveniences and troublesome disorders. The phenomena resulting from this *defective involution of the uterus*, as it is termed, after delivery, are then exceedingly important and interesting to us as medical practitioners. I cannot in this place enter more particularly into the history and effects of this condition; here I would only remark, that it forms an important element in many cases likely to come before us.

The various affections known under the general term *prolapse of the uterus*, *flexions* and *versions* of the uterus, are some of the chief of the conditions liable to be met with in women who have had children, and connected more or less intimately with an enlarged condition of the organs. Thence also arise, in many cases, *disorders of menstruation*—*leucorrhœa* and secondary constitutional affections; and secondary mechanical derangements of the functions of the neighbouring organs, difficulties in defæcation, in micturition, etc.

Another affection liable to present itself under these circumstances is *inversion of the uterus*—a condition hardly ever noticed, indeed, except as a consequence of pregnancy; traction on the umbilical cord and placenta soon after the expulsion of the child, and whilst the uterus is flaccid, large, and widely open, being supposed to be the most common cause. In rare instances, in single women affected with fibrous polypus of the uterus, the tumour, after dilating the uterine cavity, has drawn the uterine walls inwards and downwards, and inversion has been thus produced.

Incontinence of urine is an occasional result of pregnancy; it may be due to paralysis of the sphincter of the urethra, or to the existence of fistulous passages between the bladder and the vagina, produced in consequence of the presence of the head during parturition. *Vaginal rectocele*, *cystocele*, and *ruptured perinæum* are also, generally, mechanical effects of undue distension or rupture of certain portions of the vaginal walls or outlet during parturition.

It is a disputed point whether *uterine cancer* is most common in women who have had children, or in those who have had none. Dr. West says, "Though ample proof to the contrary has been long since adduced, we still find it asserted sometimes that single women and those who have had no children are most liable to be attacked with cancer. The truth appears to be the direct reverse of this statement. . . ." Scanzoni gives it as his opinion that, in a certain degree, sterility predisposes to the disease. The statistics of these two observers give the following results:—Of 118 married women affected with cancer, 7 were sterile (West). Of 108 married women affected with cancer, 36 were sterile

(Scanzoni). Here the discrepancy of the results is very obvious, and not easy to explain. All, however, agree in considering that, in women who have had *many* children, uterine cancer is more likely to occur. Thus, in Dr. West's 109 cases of cancer in which the marriage was fruitful, the average number of pregnancies per case amounted to 6.8. In Scanzoni's 72 cases, the average number of pregnancies per case was 7.01. The average number of children per marriage in this country, given by Dr. West, is 4.2—an average certainly much exceeded in the cases of cancer uteri recorded by him, and still more so in the cases of Scanzoni. It follows, therefore, that uterine cancer is often associated with over-fecundity.

Illustrations

OF

HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

HULL GENERAL INFIRMARY.

REPORTS OF CASES.

[Reported, with Remarks, by C. J. EVANS, ESQ.]

[Concluded from page 4.]

CASE IV. *Compound Depressed Fracture of Skull: Recovery.* John Bolt, aged 23, a sailor, was admitted under the care of Mr. Craven on November 5th, 1860. He was struck on the head by a winch on board ship three weeks before, was stunned for a few minutes only, and had been quite sensible ever since. He was seen by a surgeon in the town three days after the accident, and had been under his care up to the time of his admission. Over the right parietal bone there was a healthy sore, about two inches long, discharging pus. No pain was produced on pressure. On introducing a probe, the bone was found denuded of periosteum; and, a little lower down, was a fracture, the bone beyond it being depressed; the probe, when passed along in the wound, sinking down suddenly over the projecting edge of bone. There were no cerebral symptoms present, nor had there been any from the first. His head was ordered to be shaved round about the wound, water-dressing applied, and low diet given.

Nov. 21st. No cerebral symptoms had shown themselves, and the wound had nearly healed. Ordered common diet.

He was discharged cured on December 6th.

CASE V. *Fracture of Base of Skull: Recovery, with Permanent Facial Paralysis.* John Harrison, aged 38, mate of a steamer, was admitted under the care of Dr. King on February 25th, 1861, at 11 p.m. He had fallen into a dry dock from a height of about eighteen feet, his head coming into contact with some beams of wood in his descent.

On admission, he was not perfectly sensible, but was sensitive to external impressions; there was copious hæmorrhage from the left ear, and a slight scalp-wound over the occiput, not extending to the bone; but no other marks of injury. The pupils were natural; pulse slowish. An evaporating lotion was ordered to be constantly applied to the head. Low diet was allowed.

Feb. 26th. He passed a quiet night, and was now perfectly sensible, answering when spoken to. Pulse 70, rather full. He was ordered to have two minims of croton oil immediately, to have the head shaved, and to continue the lotion.

Feb. 27th. His bowels had been well relieved. There was now visible paralysis of the portio dura of the seventh nerve on the left side. He could not close his left eye; and his face and tongue (when protruded) were drawn to the right side. There was hyperæsthesia of the paralysed side of the face. He was ordered to take a grain of calomel and half a grain of opium every three hours.

March 3rd. He complained chiefly of pain in his head, especially on the left side (temporal and mastoid regions). Six leeches were ordered to be applied to the temples.

March 4th. He expressed himself as being relieved by the leeches, and they were ordered to be repeated.

March 5th. He still complained of pain in the left temple and side of the head. The leeches were repeated.

The application of leeches was again repeated on the 7th and 10th, followed by decided relief. A semi-purulent discharge from the left ear came on, and existed for some time.

March 13th. He was allowed meat every day. He was very troublesome, said he felt himself quite well, and persisted in getting up. The paralysis of the left side of the face was very marked; the hyperæsthesia of the same side was less evident. He was rather deaf with the left ear before the accident, but was much more so now.

He left the hospital on the 16th, though strongly advised not to do so. He was seen some weeks afterwards, and was then in good health; but the facial paralysis on the injured side was very strongly marked.

CASE VI. *Case of Alcoholic Poisoning (?) ; Poisoning by Cocculus Indicus (?) ; Recovery.* Hannah O'Brien, aged 48, was admitted into the Infirmary on September 25th, 1860, at 7.45 p.m., in the following condition. She was comatose, with stertorous breathing; the pupils were dilated, but contracted readily on the stimulus of light; the face was slightly flushed, but the surface of the body generally was cold and moist. Pulse 120, small and feeble. There was a slight spirituous odour of the breath.

The following history was obtained from her daughter, who came to the hospital with her. She had been drinking during the day, and had had words with her husband (both somewhat habitual to her). She was found leaning back in a chair in her house, in a state of total insensibility, at 5 p.m., and remained in the same state up to the time of her admission. Cold affusion and other rousing measures had been employed by a surgeon previously to her coming in. Six ounces of warm water were at once injected into the stomach, and this organ was then emptied by the pump; about a pint of brown fluid, with some solid matter, being withdrawn, having a marked though not strong spirituous odour. Afterwards, about six ounces of strong coffee were injected into the stomach. Mustard plaisters were also applied to the back of the neck and the calves of the legs. An hour later, as the symptoms continued almost without change, galvanism was employed. The respiration became more or less puffing in character at times, and the face livid; the pulse remained nearly steadily at 120, at times fuller than at others. She was seen by Mr. Craven during the evening.

Towards eleven o'clock, the symptoms began to remit, the first evidence of which was a return of the cutaneous sensibility. She began to move and draw her legs up in bed; then to move her head from side to side; and, lastly, she raised her eyelids once or twice. The lower jaw hung down, and remained motionless, with the mouth wide open; and the breathing was rather stertorous at times. The pulse remained at about 120, but became fuller, and the surface of the body warmer, and the face flushed. Two or three times she relapsed into her previous motionless state, with extreme depression