crease in the arterial blood-pressure, it is reasonable to conclude that such is the sequence of events in the phenomena under consideration, that, although the two phenomena may be in part the result of a common cause (altered state of the blood), the contraction of the arteries seen in those of the retina, and inferred to exist elsewhere, is, in part at least, the cause of the increased blood-tension".

And now, having, as I believe, adduced sufficient evidence to show that the arterial tension in Bright's disease is a result of the resistance to the blood-stream caused by the contraction of the muscular arterioles, this undue contraction being excited by the influence of contaminated blood upon the vaso-motor nervous system, I pass on to the consideration of some of the results of the increased blood-pressure and arterial tension.

[To be continued.]

THE CROONIAN LECTURES

ON

THE DIFFERENCE BETWEEN THE SEXES IN REGARD TO THE ASPECT AND TREATMENT OF DISEASE.

Delivered at the Royal College of Physicians of London.

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LECTURE III.—Concluded.

Respiratory Organs.—In this group, we find that, taken altogether, men are rather more liable to disease than women, and the excess may arise from the greater degree to which men are exposed. Thus, taking the year 1866, we find in the Registrar's report 41,392 males, against 35,917 females. Thus, in *pneumonia*, there are registered 14,136 males, against 10,919 females; and so on through the various forms of acute and fatal disease of the respiratory organs. To *phthisis*, however, more women fall victims than men. Thus, for the same year, 27,192 males died and 28,522 females. However, in cirrhosis of the lungs, Dr. Bristowe has shown that more males die than females. In his 38 cases, there were 22 males and 16 females.

Urinary Organs.—Men suffer twice as severely and fatally from diseases of the urinary organs as females, because of their liability to stricture and retention, to stone and prostatic disease. At the same time, the bladder suffers annoyance and violent pressure in pregnancy and during labour; but from the shortness and dilatibility of the urethra in women, local curative treatment is much more easy and successful; and calculi, which have descended from the kidney, escape generally in a few days.

It was not my intention to allude to the special diseases of the generative system, except so far as affects the general condition. But it is important to notice the much more frequent occurrence of *malignant diseases*, taken as a group, in females. Malignant disease shows itself more frequently in the sexual organs than in any other; and in the female, the high rate of activity and changes to which these organs are liable, no doubt, tends to set up the abnormal actions of malignant disease. Thus, in 1868, we find that there occurred in England 6,137 deaths from cancer in females, while only 2,743 took place in males; in 1866, in females 5,761, and only 2,332 in males. Up to the age of thirty, the sexes are equally affected, but after there is a great variation. Thus, Dr. Tilt (*Change of Life*, 1870) gives this table:

From 30 years to 40—19 females to 6 males.

" 40 "	" 50 "	" 51 "	" 6 "
" 50 "	" 60 "	" 5 "	" 1 "

In 2,781 cases collected by Leroy d'Étoilles, quoted by Dr. Tilt, the uterus was found affected in 30 per cent. and the breast in 24 per cent.

Again, the uterus renders woman very obnoxious to the absorption of irritating matters, whereby peritonitis, septic and otherwise, phlebitis, and septicæmia invade her. Its shape is one particularly adapted to retain secretions, blood, etc.; and thus, by the communication with the atmosphere, these are liable, under the warmth of the body, to decompose. Its structure is also peculiarly adapted for absorption; cavernous in texture, the lymph-spaces large and very numerous, and connected with openings in the peritoneum, it is easy to see how readily irritating matter may be taken in if abrasion exist, as after abortion and delivery

at full term; and this particularly if vascular tension have been previously lessened by hæmorrhages, ill-health, and fatigue, and other depressants, which act also in another manner. For whenever the vital force is depressed, the check it holds against decomposition is lessened, and we find that secretions, which otherwise would have been innocuous, are then more liable to the putrid change. From this special danger the male is exempt.

From the violent uterine hæmorrhages, too, or slow draining of blood, which tells so severely and often fatally on the female, man is free. From the anæmia resulting woman recovers, but slowly; indeed, I should say, never entirely. If you watch these patients, you will find them complaining of the sense of lassitude, imperfect functions, neuroses, emotional excesses, etc., very bitterly; in many for years afterwards, if not for life. Some of them try to get over it by the use of alcoholic stimulants, only to increase the feeling, and ultimately to yield to fatty degeneration.

From these special troubles also man is free; and thus he is more competent to maintain his position as a bread-winner, with muscular, nervous, and mental power, sustained by rich and nourishing food.

Malacosteon.—It is curious to notice and difficult to explain why women, and especially pregnant women, are so much more liable to malacosteon, or mollities ossium, or osteomalacia, than men. The proportion is at three or four times as many in females: always a condition of adult life, and frequently started by pregnancy, or relit by successive ones. Does it derive its virulence from the altered state of the blood, such as occurs in pregnancy? It must be something common to both sexes; but in what point does its cause exceed in women?

Before I conclude, there is one other subject which must not be omitted. I mean the period called "change of life", the "climacteric", "cessation of menses", "turn of life", or, by the French, the "ménopause". These terms are applied to women; but the term "climacteric", "turn of life", is also applied to man. In him the change is more gradual, as puberty is. Virility ceases at a very uncertain time, lasting till at least 80 in some; and though, no doubt, retrograde changes tending to decay take place in him, yet they scarcely can be said to be accelerated at any definite period; they are generally slow, and to himself scarcely noticeable. No doubt, when man has passed the prime of life, and his system is less vigorous than before, he is conscious of this change; and perhaps, if the task he set himself in the world's work be only half-accomplished, and the great struggle is to come; if he have already overtaxed his strength, and then only partly succeeded; or, still more, if he have failed, his mind recognises its position, and the nervous power, losing its sustaining force, is apt to yield; and melancholia, hypochondriasis, dyspepsia, may easily supervene; and, supervening, add to the depression. But this is not the equivalent of the ménopause in women. This is definitely attended by the involution of the ovary; the cessation of its activity, the reverse of the accelerated growth of it at puberty. As the latter was accompanied by the process of menstruation, so this is accompanied by its cessation. In other words, the ovary fails to stimulate the nervous and vascular system generally, and the uterus in particular; and almost invariably the power of conception is lost, just as it commonly ceases upon the occurrence of amenorrhœa earlier in life. We shall not be far wrong probably, if we were to say that the negation of ovarian action occurs in both conditions. But does ovulation cease entirely? It would be difficult to say "Yes" at present, because we saw imperfect ova passed away in childhood, and it may be that imperfect ova pass away after the cessation of the menses. But it is quite certain that all the tendency to various troubles, to which I have partly alluded as belonging to females, principally after puberty, now cease, or at least do so after a time. All the local uterine irritations, engorgements, and fluxes; all the reflex symptoms, neuroses, vomiting, neuralgias, headaches, pass gradually off; and then, when the change is complete, the woman passes much into the state of one who has had her ovaries removed, having a tendency to revert to the neutral man-woman state; yet not entirely so, because there remains impressed upon the mind, memory, and nervous system the reflection of the woman; in manifold ways recalling to her actions and movements that manner and style she had in earlier life.

But, after the change has been completed, we generally find her system improved; not disturbed by the periods, nor pregnancy, nor by the multitudinous reflex symptoms which distracted her attention; losing sexuality and its various impulses, she becomes more capable of rendering herself useful. She is less of the woman she was than a man is a man at the same time of life. The study of the subsidence of menstruation tells us the same physiological facts as those which accompanied its origin; and further, they point out the essence of those complaints which, troubling the woman so long, subside at this epoch,

showing how very neural they were, directly or indirectly, and how few of them are attended by any lesions or change of structure. Thus, suffering all their menstrual life, women now generally become comfortable, stout instead of emaciated, composed instead of hysterical. It is true that those who were not in this state but rather redundant, unless during the transition state they had free blood-loss, become hyperæmic relatively, and suffer its effects, such as sweatings, flushings, headaches, etc. But where the later menses were free at the change, these disturbances are not much felt. However, while the change is going on, while the ovaries are fitfully discharging ova, there is much disturbance of the system, both vascular and nervous; sometimes there is hyperæmia with its results; sometimes severe blood-loss; sometimes as the occasional menstruation occurs, the reflex sympathies are rudely perturbed, producing much disturbance and distress. The cerebro-spinal system is excited or unduly depressed, and the mind often more or less vacillating, so that insanity and melancholia are often observed. Sometimes the vascular tension is so great as to result in violent uterine hæmorrhages, bleeding from piles, and apoplexy; or excitement of the sexual organs so great as to kindle malignant disease, as I have already shown, in the uterus, ovaries, or breast.

Time would fail me to point out all these changes, but this is the less important, because they are so well known to you. When, as I said before, the change is well-established, woman passes on to old age better than man, because free from sexual activity and its many demands on the powers of the system at this later period of life; and, as a rule, suffering less from disease and more secure against external battles and exposure to the elements; more cared for, she more frequently outlives her male comrade in the battle of life.

I have thus, though but imperfectly as I feel, placed before you an outline of the points wherein the male differs from the female. In all these points, some allowance must be made for the effect of the habits and mode of life belonging to each sex, tending more or less to disease; and also for that other influence already mentioned, namely, the transmission of sexual peculiarities. The accurate estimate of these forces is very difficult; though it is not of so much consequence to the subject before us, because this deals with the actual accomplished result. I venture, however, to think that it may serve us something in our diagnosis, elucidation, and treatment of these diseases, thus to bring them in contrast.

There are many things that suggest themselves upon consideration of the foregoing facts. A few of the most prominent I will mention.

1. In studying diseases, we may expect to find the greatest information in that sex in which the disease is more marked or more prevalent; and, also, we can study it best at that age in which it is more marked or more prevalent.

2. We may possibly find a solution of the difficulty in the nature of a disease by first noticing how it affects the sexes differently, and comparing this with the general sexual differences.

3. In females, and in men of a similar type, we cannot allow an irritation or depressant to continue long without the liability to greater effects than in the typical male.

4. Neither can vigorous treatment in these be so severe, nor prolonged without the liability of setting up irritation itself in turn.

5. The emotional system in women and men of feminine type being easily disturbed, more care must be given to allaying its excitements in these persons.

6. In cases of emotional excitements, neuroses, functional derangements, unusual pains, etc., we should endeavour to find the cause, not shielding ourselves under the terms "hysteria", "nervousness", "fancy", etc.

7. Inasmuch as cancer of the sexual organs is so frequent in women at the climacteric, it should be a rule to us especially to allay irritations and disturbances of these organs and system as much as possible.

8. Men need not be more subject to gout than women, provided for a few generations the causes which develop gout in adult life were carefully avoided.

9. We should be careful not to underrate any sign of commencing disease of the cerebrum or spinal cord when it presents itself in men.

Many other hints may be taken which I will not detain you in mentioning; each of you will be able to do so for himself.

I place before you a table drawn out from the foregoing lectures, which show the distinction of the sexes in regard to disease more readily. It is difficult to estimate accurately the proportion in such cases as chlorosis, anæmia, etc. But the proportions may be taken as approximately correct according to our present information.

Gentlemen, I feel conscious of possibly wearying you by placing before you a view of human nature, taken, perhaps, rather from the obstetric side; I could easily add to it; the sketch is not complete, it

is but a rough one. Yet, to properly study our complex nature, we require not only the assistance of the binocular stereoscope, but a poly-scope. But, to make a perfect combination, one side should not be too salient. I trust mine is not so.

Table, showing Relative Frequency of Disease in the two Sexes.

	Males.	Females.
Cyanosis	++	+
All cases of congenital malformation (Bryant) ..	142	71
Congenital and developmental diseases (1st year	7,027	5,311
(Registrar-General's report) 1866 { 2nd year	1,067	.941
" " " 1868 { 1st year	6,797	5,395
" " " 2nd year	994	.910
Congenital talipes	97	.48
Idiots at birth	2.1	.9
Deaths after birth (Dr. Collins) { within half hour	16	1
" " " { within one hour	19	2
" " " { within six hours	29	6
Acute hydrocephalus	1,707	1,349
Convulsions	12,348	9,353
" " " 1866 { 1st year	1,668	1,513
" " " 2nd year	11,680	8,905
" " " 1868 { 1st year	1,480	1,367
" " " 2nd year	34	14
Laryngismus stridulus	66	38
Rachitis	69	49
" " " 1868	100	82.89
Croup	22	8
" " " Churchill	17	5
" " " Trousseau	=	=
Whooping cough	=	=
Paralysis	=	=
Chorea	122	300
" " " 13	16	=
Rheumatism	=	=
Rheumatic inflammation of heart	=	=
Dentition	2,384	1,909
" " " 1866 {	2,221	1,924
" " " 1868 {	=	=
Zymotic diseases	=	=
Diphtheria	++	+
Congenital syphilis	=	=
Anæmia	Rare	Very frequent
Chlorosis	"	"
General neurosis and functional derangement ..	"	"
Simple ulcer of stomach	1	3
Exophthalmic goitre	8	42
Bronchocele	15	105
Insanity	=+	=
Diseases of brain	=	=
Eclampsia	=	=
Spinal diseases	128	49
So-called spinal irritation	Rare	Frequent
Cerebro-spinal meningitis	++	+
Diseases of digestive organs	=	=
Intussusception	2	1
Typhlitis	42	8
Acute atrophy of liver	+	++
Gall-stones	2	1
Hypertrophy of heart	2	1
Atrophy	=	=+
Dilatation	++	=
Diseases of valves	2	1
Angina pectoris	88	8
Vascular engorgements	Rare	Common
Gout	Very common	Rare
Diabetes mellitus	++	+
Acute disease of respiratory organs	=+	=
Phthisis	=	=+
Cirrhosis of lung	22	16
Urinary organs	2	1
Malignant diseases	1	2½
Dr. Tilt—From 30 to 40 years	6	19
" " " From 40 to 50 years	51	6
" " " From 50 to 60 years	5	1
Malacosteon	1	3

TUNBRIDGE WELLS MEDICAL SOCIETY.—A new Society, under favourable auspices, has just been established at Tunbridge Wells, named, "The Tunbridge Wells Medical and Surgical Society". That rapidly increasing town being centrally placed in the districts of East Sussex and West Kent, it is anticipated the meetings will be well attended. Already nearly forty members of the profession have joined its ranks. On Friday, April 13th, the first meeting for papers and discussion was held at the Great Hall. Dr. Milner Barry, Dr. Johnson, Dr. Wardell, Mr. Marsack, and Mr. Bisshopp, read communications and cases of much interest. For the present year, Dr. Wardell has been elected President; Dr. Colebrooke of Southborough, and Mr. Wallis of Hartfield, Vice-Presidents; and Mr. Cleland Lammiman of Tunbridge Wells, Secretary.

MR. NEWTON H. NIXON, at present on the staff of the School Board for London, has been appointed Secretary of University College Hospital. The position was open to public competition, and there were one hundred and eighty-four candidates.