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OBSTETRIC NURSING. - BY OBSTETRICA, M.B.N.A. -

PART I.—MATERNAL.

CHAPTER VII.-THE LOCHIAL PERIOD (DUTIES DURING).

## (Continued from page 40.)

POINTED out in my previous paper that the heat of the body in health was constant in spite of external influences; in the pulse it is not so, for being dependent upon the heart's action, it is modified by a number of circumstances that affect that organ, such as age, sex, stature, emotion, position of the body, the hour of the day, and the season of the year. In the next division of my subject I shall touch upon the fœtal pulse, and show its deep importance and significance in early infantile life, and hence a matter of great interest in Obstetric Nursing.

What is the pulse? An arterial throb due to the momentary distension and recoil of the coats of an artery; and in medical practice the left radial artery is selected to be felt, which you feel by placing the bulb of the fore and middle fingers of your right hand upon the left wrist of the This arterial heat is the immediate, patient. not the remote, cause of pulsation due to the muscular force of the heart, which during a systole of the left ventricle closes the mitral valve, and forces the arterial blood through the semi-lunar valve into the aorta, to be distributed through the arterial system.

So much for the mechanical causes of the pulse; we must now consider its characters, and the clinical deductions we draw from them; and here I must observe that my remarks about the pulse apply primarily to woman, and secondarily to that special condition of her sexual life, the puerperal state; and I have mentioned sex as influencing the action of the heart, which, like all the other involuntary muscles, is controlled by the vasa motor nerves of the sympathetic nervous system, and this again governs the sexual life of woman, as I pointed out to you in one of my previous papers. As a clinical fact you will find that during labour the pulse rises with the "pains," and falls in the pauses. Lactation is ushered in by a rise in the pulse, and every changeful phase of the parturient uterus is felt

by the heart, and the varying pulse denotes it. What are the characters of the pulse we are most often called upon to observe? First, frequency; secondly, force; thirdly, duration; fourthly, volume. The three first can be ascertained

word) and recorded on the pulse chart, familiar to every Hospital Nurse; but the last, and perhaps the most important clinically, can only be noted by touch, and this again must be perfected by practice.

Let us consider the points in the order we have placed them.

The *frequency* of the heart's beats varies considerably, and you will see by your text books that the pulsations average, in a healthy adult, about seventy a minute. In the male it is less, in the female above that number; and the differences in the sexes is said to range from ten to fourteen beats a minute. Hence, you see, the immense influence sex exerts over the pulse; and in our portion of Nursing work we must never lose sight of this fact. The difference has been attributed to stature; but to my mind it seems rather referable to sex and the physiological influence it has over the heart's action in women. We cannot enter upon a dissertation upon the subject here, but commend it to the thoughtful consideration of women engaged in Midwifery Nursing or practice. Age remarkably influences the heart's beats; they are more frequent in infancy and old age than in the intermediate periods of life; and as our patients are for the most part women in the prime of life, we may take a pulsation of seventy-five as about the normal rate in lying-in women. The pulse falls after delivery as much as ten or fifteen beats a minute, and, as a rule, continues below par until the milk-flow sets in, when it may again rise to seventy-five or eighty *temporarily*, subsiding when lactation is established. Speaking generally, we may say that a pulse above seventy-five is a cause of disquietude, especially when we consider that our patients maintain the recumbent position for some time after delivery.

The force of the pulse marks the muscular strength of the heart, and its power of resistance to the arterial blood column in the aorta, shown on the chart by the *length* of the up and down strokes ; the duration of the pulse also depending upon the torce of the heart, is shown by the horizontal distance between the commencement of the *upward* strokes. Both force and duration depend upon the heart's strength; they can only be demonstrated mechanically, and do not very much affect the rate of the pulse. We must remember that when the left ventricle of the heart has forced the arterial blood into the aorta its task is o'er; the distribution of the arterial stream is left to the systemic or capillary circulation, and we shall see how materially it affects the pulse in disease. We have thus in briefest outline touched upon the mechanism of the pulse, and it is upon mechanically by the sphymograph (a barbarous the integrity and perfection of the muscular



