

women of savage tribes, in whom the dress of the two sexes is practically alike, the chief movements noticeable to the eye in inspiration are widening of the chest at its lower part and bulging of the abdominal wall. There is at the same time a rhythmical action of the muscles of the pelvic floor, induced by the increase of abdominal pressure resulting from the flattening of the diaphragm, acting against the resistance of the tense abdominal muscles.

That the respiratory movements are practically alike in adult persons of the two sexes, I think has been fully established by the observations of Mays, Dickinson, and others, as well as by my own studies upon Indian women of various tribes, Chinese women, Italian peasant women, and American women whose breathing has never been interfered with by tight-fitting clothing.

The relation of corsets and tight bands to respiration has usually been studied with reference to their influence upon the lungs or the respiratory process. The important relation of the respiratory process to the abdominal and pelvic viscera has too often been overlooked, although the disturbance of the normal relation existing between respiration, and the circulation of the blood in the abdominal and pelvic viscera, is undoubtedly a matter of far greater importance than any interference with the respiratory process occasioned by constriction of the waist. The effect of inspiration is to increase abdominal tension. This is accomplished by the flattening of the diaphragm, which is facilitated by the increase in the lateral transverse diameter of the lower part of the chest, induced by contraction of the serratus and other inspiratory muscles. The effect of abdominal tension is to facilitate the emptying of the veins of the portal circulation, in which there is a natural tendency to congestion, as the result of the resistance of the hepatic capillary system, which intervenes between them and the general venous system. In normal respiration, in which the intra-thoracic pressure is diminished by proper expansion of the chest cavity, this emptying of the portal circulation is also facilitated by a sort of suction action, which draws the blood from the abdominal viscera into the thoracic cavity. Thus, in normal respiration there is a double action, the tendency of which is to accelerate the circulation in the abdominal and pelvic organs; and it is reasonable to suppose that the health of these organs must largely depend upon a continuous and efficient action of this pumping process, which is so essential a feature in the maintenance of the blood current in this region of the body.

(To be continued.)

Stricture of the Oesophagus. Gastrostomy.

BY MISS ALICE DANNATT.

ON Monday, August 5th, 1895, E. P., a married woman, was admitted into the L. C. H. suffering from a malignant growth in her throat. The patient was unable to swallow anything, and being very low, peptonised nutrient enemata, composed of yolk of egg, milk, beef-tea, and brandy were ordered to be given three times a day, and one nutrient suppository every four hours. The growth had been troubling Mrs. P. for the last four years; but until two months since she had been able to swallow bread and butter. During the last two months she had taken only liquids. For five days before coming into the hospital she had not swallowed anything; she had held liquids in her mouth, and had, for two days, been fed with nutrient suppositories.

Mrs. P., who was tall and broad, was emaciated and weighed only 6 st. 4½ lbs. Her abdomen was quite flat, and formed a distinct angle with her ribs. She had a most pinched appearance; every particle of the fat of the system was gone—indeed her appearance was that of starvation. The swelling in the neck was large and extended all round the thyroid cartilage, but it was freely movable and not adherent to the skin. The patient did not complain of pain, and her voice and breathing were not affected, but on trying to swallow anything, solid or liquid, it was almost at once regurgitated. No enlarged glands could be felt, and the chest appeared to be normal.

On the day after admission (Tuesday, August 6th), when the history of the case was taken, the patient said that for seven days there had been no action of the bowels; and that menstruation ceased four years since, when the growth began in the throat.

The patient's temperature on Tuesday, the 6th, was 99°. Specific gravity of urine 1029, acid, urates, no albumen. Mrs. P., who was always thirsty, frequently held water or lemonade, or ice in her mouth; probably a little liquid was absorbed, but none was swallowed.

By Wednesday, August 7th, owing to the nutrient enemata, there was a marked improvement in the patient's strength and appearance. Her temperature was normal, her pulse 76, and respiration 22.

On Thursday, August 8th, gastrostomy was performed. At 7 a.m. ʒiv. of nutrient enema was given, and at 8.30 a.m. a simple cleansing enema was administered; the bowels were slightly opened. At 10 a.m. the abdomen, which was washed the evening before with soap and warm water, and sponged with ether and covered with a carbolic pad, was again washed and sponged with ether, and a fresh carbolic pad was applied. At 11 a.m. a nutrient enema was given, and at 12.30, in a specially prepared ward, the operation was begun.

The anæsthetic was ether, given in Clover's inhaler. Mrs. P., who was a very calm and quiet person, took the anæsthetic like a child. The instruments were washed in Izal and laid upon a double towel wrung out of Izal, and laid in a white porcelain tray; the sutures were silk, and silk-worm gut. The silk sutures were steamed for half-an-hour; these and the silk-worm gut sutures were dipped in Izal.

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