

THE
Journal
OF
Nervous and Mental Disease

Original Articles.

A CASE OF TACTILE AMNESIA AND MIND
BLINDNESS.

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Mrs. B. L., sixty years old, colored, was admitted to the Polyclinic Hospital by Dr. Schneideman on August 8th, 1896, complaining of difficulty of vision. The examination of the eyes gave negative results and she was transferred to my care. There is nothing of interest in her family history except that her mother and one brother died of palsy, her father in a fit. The patient has always been a strong, healthy working woman and is the mother of fifteen children. Her present trouble began suddenly about one week before she came to the hospital. While sitting at supper, vision began to fail and decreased so rapidly that at the end of two days she could not distinguish objects at all. At the same time there was numbness of the upper lip and slight frontal headache. Both these symptoms soon passed off.

Examination.—She is a fairly well nourished old woman. Though not at all insane, she is usually dull and apathetic, lying quietly in bed, talking but little and showing interest in nothing. At times, however, she will brighten up and chat with the other patients and visitors. She is perfectly coherent in speech, understands all that is said to her, and has no difficulty in replying. How much of her stupidity is congenital, or as one may say, natural,

and how much due to disease, I am unable to say, but I think the former is by far the larger element, and the latter due to the shock caused by her sudden affliction rather than to any definite brain lesion.

The patient complains only of difficulty of vision, saying simply, "I cannot see." This, however, cannot be her real trouble, since in walking she avoids obstacles, and can tell when an object is placed before her, though she can not recognize what it is, its shape or its color. Dr. Jackson kindly examined her eyes and reports: "Low hypermetropia; pupils react moderately to light; arcus senilis complete; media otherwise clear; retinal vessels small, but discs of good color; fundus normal; apparently no fault with ocular muscles, but patient refuses to fix." Dr. Schneideman found "No apparent disease of eyes to account for poor vision. The parts of the eyes appeared normal and there was no disease of nerve or fundus."

She staggers slightly in walking and is evidently weak, but there is no true palsy. There is slight swaying while standing. The knee-jerks are somewhat below the average in extent of movement and are readily reinforced. The plantar jerks are increased. Voluntary speech is normal. She was never taught to write. Touch, pain and temperature senses are normal in the arms, legs and face, and she localizes sensations correctly, but with the hands fails to perceive objects by touch. With the feet she can distinguish the bare floor from a rug. If a pair of scissors is put in her hand she can not tell what it is, and when asked if it is a knife, says, "Yes, because it feels sharp." She cannot recognize a watch put in her hand, but when it is held to her ear says immediately, "It is a watch, I hear it tick." She calls a match a pencil and makes many similar mistakes. This loss of tactile perception is not, however, absolute. For example, she recognizes a finger when she grasps it, and when I give her my hand on meeting her she shakes it naturally. Again, she always recognizes a silver half-dollar, but one, five, ten and twenty-five cent pieces are all called "quarters." When in bed she grasps the sheet and draws it up, evidently knowing what she has hold of, but she can not feed herself because she does not know what to do with knives, forks and spoons. She can button her clothes, but if handed a loose button does not know what it is. Taste and smell are normal. Hearing is good and, as stated above, there is no motor aphasia. The bladder and rectum

are under complete control. Repeated examination of the urine fails to reveal albumen or sugar. The thoracic and abdominal organs are normal. She was discharged from the hospital September 5th, 1896, in the same condition as when admitted.

Remarks.—There are two points of great interest in this case: Mind blindness, for such I take it is the visual trouble rather than ordinary blindness; and the loss of tactile perception. I wish especially to speak of the latter. It must be very rare, or at least very infrequently observed. For my own part I have seen it only once before. It was a case reported by Dr. Weir Mitchell in the "Medical News" (Vol. 62, p. 101, Oct., 1892). By the courtesy of Dr. Mitchell I had frequent opportunity to examine the patient. She was a married woman, forty-two years old. Her illness began five years before she came under observation with difficulty in seeing large objects, though small things were seen and recognized without trouble. For example, she could see a letter but not an entire word. Glasses gave no relief. During the second year she lost in great degree the power of recognizing colors. She could walk well and avoided obstacles. Dr. Pershing, of Denver, examined her and found she could tell light from darkness. The pupils were equal and each reacted to light thrown in the other eye. The fundus was normal. She walked well and found the knob of the door without feeling for it. In October, 1892, Dr. Mitchell examined her and found the following: The facial expression was vacant. She walked with apparent ease and rarely stumbled. She said she could not tell objects placed before the eyes. She did not recognize a watch by touch, but did by the ear. She did not recognize a clothes brush or pencil by touch. At the first examination she failed to recognize coins, but later did so without difficulty. Touch, pain, temperature and taste senses were normal. She could distinguish the odors of cologne, benzine, alcohol and oil of turpentine, but did not know them by name. She could write her initials and the first part of her name. She could not write isolated letters, except C and O. Spontaneous speech was normal.

Dr. de Schweinitz reported: "Squint in the right eye. The pupils are large and react slowly to light, the right very sluggishly. The discs are grayish red. The veins are full. The arteries small. There is lack of fixation, but the

patient sees light in all directions. The right eye open (left closed) perceives objects to the left of the median line. The left eye open (right closed) perceives objects to the left. There is partial right lateral hemianopsia. She matches blue but confuses red, green and all other colors."

What inability to perceive objects by touch without any affection of the primary tactile sense depends upon, we do not know. It is analogous to mind blindness; so analogous that the discoverer of the latter might have assumed the existence of the former. Just as in mind blindness the patient sees but does not perceive, because he has lost the stored-up results of previous visual stimuli; has lost, for example, the many sensory impulses that go to make up the visual perception of a knife, while the mere raw material of a perception, the sensations, are felt; so our patient has lost the tactile mental images, as we must call them till increased knowledge gives us a better name, stored up from passed tactile experiences, and, therefore, having nothing with which to compare the sum of sensations received, when, for example, she holds a knife, having no memory of what the sensations were when she held a knife before, she cannot perceive it unless some other sense beside touch is brought into use. The condition thus seems to be a memory loss, a partial amnesia. There are other possibilities however. For example, the trouble may be in grouping together the many sensations received from one object by touch, the making of them into one whole, rather than in the loss of old mental images with which the new are in health compared. I think we may assume that some definite area of the brain is concerned with tactile mental images, just as certain areas are concerned with mental hearing and mental vision, but where it is located we are at present entirely unable to say.