NARCOLEPSY¹

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LH. P. was forty years of age when he first came under observation, referred to me by Dr. Felshaw of Holly, Michigan. As a boy he lived on a small farm and worked by the day. At eighteen he was employed as laborer by a lumber company and later for fourteen years on a band saw and shaper; recently in a piano factory. Education is slight. He found reading particularly difficult, being easily embarrassed. He drank occasionally but has no habit of intemperance and was never intoxicated but once. Since eighteen he has smoked excessively; sexual habits good. His father deserted the family before the patient's birth. The father was industrious and resourceful, was temperate in habits, but from one account received, somewhat erratic. The mother died of apoplexy at the age of sixty-eight. In later years she suffered from rheumatism and occasionally from asthma. A sister of the mother died from what was called "bronchial consumption;" she "choked to death."

From the age of ten to twenty years the patient suffered from asthma. He speaks of impairment of hearing in the left ear but examination does not confirm this. At the age of eight he received an injury to the head from an axe helve. There is a two-inches-in-length, narrow groove-like line created apparently at the expense of the outer table following the coronal suture right side; no depression of bone. He has no recollection of how serious the trauma was regarded at the time it occurred, nor as to the extent of debility. There is a difference of opinion between his wife and himself as to emotional and inhibitory qualities. He himself claims a good disposition but the marital partner avers that he is high tempered and sometimes unfair to the children.

I was consulted because of a condition of somnolence which came upon him now and then overwhelmingly and had been

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present for sixteen years. It often affects him while at work, and almost invariably if he is not busy. It has increased in severity with time but varies in accordance with the activities of the moment. The recollection of the first attack is that he became drowsy and had to fight off the sensation. A fellow workman at a machine eight or nine years ago mentioned to the patient (so he says) that he had seen him several times with the eyes shut and feeding a planer. This person subsequently interviewed, had no recollection of the observation but said that he had "seen him when he looked sleepy, and considered him of the lazy sort." When drowsiness threatened, he was accustomed to shake himself or to go for a drink of water. Frequently in this manner the attack was aborted. A change of employment was always helpful. Such had been made just before I saw him two years after the first consultation. He had been assigned to a new and slightly unfamiliar work and for the preceding week there had been no attack while in the shop. He can drop asleep at any time he wishes and is certain to when he sits down on return from work. A description of the last attack is like many which he has experienced. "Before I knew it I was dumb-founded like." He had dropped asleep soon after reaching home. "My wife called to me," he said: "I woke right up but could not for a time move from the chair. I couldn't have moved if the house had been on fire. It was half a minute before I could get myself together." "Once when I was sleeping in my chair a rap came at the door. My wife called the second time. I heard her but couldn't raise myself out of the chair. I seemed dumbfounded like but knew there was somebody at the door. I go to work in the morning. Sometimes during the forenoon there will be a feeling of sleepiness. It is almost impossible to keep from dropping my work. Sometimes the sleep is heavier than others according to what I am doing; am bothered in the same way in the afternoon. If I feel it coming on I go out into the fresh air. It will come back when I go home. If I sit down I go to sleep." The awakening, if spontaneous, is always the same. "It leaves me as quick as scat. Lots of times it comes over me like dumbfounding. I don't realize what I am doing. I can't really explain it, I slack right up with my work. If I go too sound asleep I can't refer myself to what I was doing at the time. I have to stop and look at feel work to see if I am doing it right. Just after it leaves me I my pain over my right temple both sides and back of the eyes."

Sometimes he has a hazy recollection of what is going on and when lying down apparently in deep sleep answers as if partially conscious.

At the first examination he mentioned pain over the temples and uncomfortable sensations in the neck following attacks. Latterly, there have been no phenomena of this kind. An interesting feature is related to emotional expression. He is unable to laugh as others do. If anything amuses him, the physiognomy is distorted and uncomely. When playing with the children he is apt to lose muscular control. "If anything should come up that would cause me to laugh real hard, that strikes me as real funny, I seem to wrinkle right down, losing my strength until I catch myself."

During the latter part of the night he says he is as a rule wakeful. His wife sleeps with him but has not observed any evidence of convulsive attacks. There has never been biting or laceration of the tongue, never blood on the pillow. His wife is perfectly confident that in the emotional attacks mentioned when he crumples up, there is not the slightest loss of consciousness. The sleepy state lasts as a rule not more than fifteen minutes when, if he is not aroused before, it terminates spontaneously and control is complete. If awakened, he finds it momentarily impossible to rise from the chair. He speaks of slight memory defect but from his own account this is immaterial. He has no difficulty whatever in giving an accurate account of a recent day's doings. "Once I was stamping numbers on a piano and it came on me so quick that I stamped the whole dozen numbers all the same. After the attack was over, it occurred to me that I might have made a mistake so I looked at them, marked the numbers out and stamped them all over again. When anyone goes by me during an attack, or particularly when anyone comes up behind me, I am just as wide awake as ever." His description of "dumbfounding" indicates merely a strong impulse to go to sleep. Whether this is resisted or not depends upon circumstances. There are no tremors, ataxia, or Romberg. The reflexes are normal, the pupils are equal, there are no focal or Jacksonian symptoms.

He is subject to dreams which are for the most part pleasant. Once in a dream or confusional state he jumped from bed, seized and loaded a gun, and made his way to the kitchen. This room was colder than others in the house and the chill awakened him. He explained to his wife that he thought he had heard a noise.

She attributed the circumstance to nightmare. His wife says, "When he is pleased over anything, I could lead him around or throw him down. He seems to lose his strength altogether. When he returns from work at the close of the day, he almost invariably goes to sleep in his chair. Sometimes he will answer if spoken to. At other times it is necessary to shake him." She is under the conviction that he was marked by his deserted and lonely mother. He was born August 1st and in the later weeks of pregnancy the heat affected her greatly. She was accustomed to sleep in her chair for long hours.

Kraepelin makes the following observation respecting the condition under consideration: "Furthermore Friedman, following the work of Gelineau, has set off a special form of small attacks, which he designates as *Narkolepsie*. Such conditions consist of brief transitory mental lapses in youthful individuals, which resemble epileptic attacks, but are regarded by him as being peculiar attacks that occur after fright and emotional excitement, or looking into the light. They are not influenced by bromides and do not lead to deterioration. After a number of years, one may recover. The patients have attacks more or less frequently, having as many as 100 during the day. They last for $\frac{1}{4}$ -3 minutes, and during this time there exists a sort of inhibition of thought, without loss of consciousness. This robs the individual of his freedom of action and is sometimes accompanied by peculiar actions, such as exhibitionism. The pupils are often dilated and the eyes turned upward. It seems to me most likely that these conditions should be regarded as hysterical. Much valuable information can be found on this subject by further observations and perhaps it would be well to include among these, those which have been described by Schanz, Codivilla, and Gaugele, who have observed attacks like epilepsy occurring after severe orthopedic operations. These attacks seem to be released by the emotional excitement of the situation."

Dejerine writes more clearly.

"*Narcolepsie*.—This term was employed for the first time by Gelineau (1881) to designate a rare neurosis, characterized by a sudden, irresistible need of sleep, ordinarily of short duration, occurring at intervals more or less frequent and obliging the subject to fall or to stretch himself out to obey it.

"The onset of sleep is more or less violent, preceded by extreme lassitude, by a sensation of cephalic constriction. The eyelids are heavy, the eyes are the seat of light tingling. The

gait is painful and uncertain. Almost always before the patient yields to sleep there is a prodromal period, but this is more or less short and sometimes so slight that the patient is attacked in the midst of his occupation without time to protect himself against accident to which the deep sleep exposes him. When the patient succumbs to sleep, muscular relaxation is generally complete. The lifted limbs fall inert, lines of expression are effaced, and even, according to Féré, the muscles of the face appear paralyzed and the cheeks move with each respiration. Sometimes in place of being in relaxation, the muscles are in a more or less marked convulsive state.

"The general and special sensibilities are blunted and intense and repeated effort is required to momentarily rouse a patient from torpor. The general functions of the organism are slowed. The temperature remains normal.

"During sleep the intellectual functions are variable. Now unconsciousness is absolute. Again, certain elementary psychic processes persist, disclosing themselves by gestures, confused words, and sometimes by somnambulism. There are patients whose consciousness is vigilant and who are afterward capable of relating that which has happened during sleep.

"The duration of the attack varies from some seconds to several hours and is almost constant for the individual case. Awakening is sudden or gradual, corresponding to the length of the sleeping state. The circumstances which determine crises are extremely variable but are sometimes quite definitely fixed for the individual subject."

I last saw the patient by appointment on the 30th of March. While waiting in the office he fell asleep in a chair and two employees who happened to see him remarked that the sleep was of natural appearance. Physical examination was practically negative. He is well developed. There was no evidence of present or past venereal or constitutional disease. The blood pressure was systolic 120; diastolic 75; Urinalysis gave no findings of consequence.

Naturally, in view of the head trauma in particular, petit mal pressed itself obtrusively for consideration but was excluded to my own complete satisfaction.