

- Clinical presentations of a puerperally-induced and a menstrually-induced hyperkinetic motility psychosis
- Pseudospontaneous movements
- Idiosyncrasy of the movement
- Absence of compulsive speech in this
- Psychomotor compulsive speech
- Description of a case of jacktatoid compulsive movement
- Verbigeration in compulsive speech
- Choreatic compulsive movement
- Impulsive actions
- Disarrayed restless movement
- Hypermetamorphic compulsive movement
- Periodic recurrent course of the illness
- Prognosis and treatment

Lecture

Gentlemen!

The patient who you see looks feeble, pale, and exhausted. In fact, for 4 weeks she has been in a severe state of arousal, in which she has produced an excess of movements, which probably explains why all her energy has been quite used up. To our great surprise, a turn-around occurred from yesterday, after she had been in constant motion the day before, mostly with histrionic-melodramatic expressive movements, and had been singing virtually without ever stopping. The

way she carried out her singing was certainly surprising: It was accompanied by a fine tremor of her lower lip and the whole of her lower jaw, a movement akin to that of chattering teeth, but without the teeth ever occluding. Her voice thus attained a regular, tremulous character, reminiscent of many barrel organ performances, the more so as she sung only the notes, without accompanying words—evidently a wholly invented, sustained hymn, almost always at very high pitch—with steady, quiet ‘conducting’ [Ed] movements.

This singing, which, along with the patient’s troubled, perplexed and unhappy facial expression, gave her a ‘constrained’ [Ed] look, hindered her eating food; and it ceased only in the evening, when, after of an injection of hyoscine and morphine, sleep ensued for several hours.

Firstly, convince yourselves of the extreme exhaustion and frailty of this patient. When she is raised to her feet, she sways and needs support; seated on a chair, she occasionally lets her head fall back, apparently in extreme fatigue; and she appears distracted when enquiries are made, or begins to answer, but soon loses the thought and stares into space. Evidently, she is able to follow only with effort, and I could not ask more of her, because she really is very much in need of rest and protection. Yet her perverse facial expression is remarkable to us: Firstly, she opens her eyes so wide that the whites can be seen above the cornea; then she wrinkles her forehead as if in anger, and again protrudes her lower lip and lower jaw.

Further, at times, we see marked impediments in her speech: she forces out a single word like a stutterer, labouring a long time over initial consonants; or occasionally, she utters gurgling, inarticulate sounds; and she is unable to show her tongue when requested, but only opens her mouth in an awkward manner. Words are often toneless, and therefore unintelligible. Yet at other times she speaks with no trouble, and in this way tells us how her illness started. She is able to give her name correctly, her age, and the date of a previous confinement; she also expresses her feeling of being ill, that she feels dizzy, and cannot breathe properly. She also admits that the clinical examination took its toll on her. Now and then she turns her head and listens, evidently attracted by phonemes. She often turns to the female attendant beside her, as if for help, and it can be seen how hard it is for her to stay attentive. Yet familiar things, like the Lord's Prayer, seem to give her no trouble; she repeats it in a devout tone, with folded hands. She then voluntarily repeats Luther's exposition on one of the Ten Commandments, and begins to sing a chorale, with faultless words and melody. I then raise her right arm to a horizontal position; she permits this without resisting, and holds the position for a short time, before letting her arm sink. Bending her head forwards produces pain, and is met with mild resistance. When she stands to leave the auditorium, she spreads her arms sideways, palms supine, and makes a theatrical gesture, but then follows the attendant in the normal way.

Gentlemen! As you have seen the patient's mental state was not normal. First of all, apathy equating to exhaustion seemed to prevail, then moods of euphoria or irritation appeared, all within moderate limits, and always combined with expressions of helplessness and disarray. She was not visibly, or not adequately orientated to her surroundings and situation, and made the strangest statements about her own body: Last night she had a 'hump' [Ed], which has gone away again, and her 'eyes have been slashed' [Ed]. Any explanations we could obtain about the cause of her movements were quite incomplete; a few isolated statements seemed to show that she had been 'compelled' [Ed] to sing and dance.

Gentlemen! As I soon concluded, our patient has suffered a pronounced hyperkinetic motility psychosis over 4 weeks, and we see the subsequent state of exhaustion clearly showing signs of this illness, which are largely motor in character. Her facial expression conveys no psychological motivation; and the occasional protrusion of the lower jaw and lips, the peculiar impediment of speech, the fluctuating inability to protrude her tongue, the pseudoflexibility, unmotivated histrionic gestures, and equally motiveless singing are all distinct remnants of the preceding motility psychosis, to be interpreted partly as parakinetic, partly as akinetic symptoms.

With regard to the aetiology of our case, we know only that the illness developed acutely over the course of a few days, after the patient, a 27-year-old potter's wife, married for 9 months, had experienced her first- and normal-delivery at the women's clinic, and had remained psychically normal for 10 days. She had breastfed another child besides her own, and was thus somewhat debilitated. At home she was greatly worried about her child, listening to every breath, expressed fear that he might die; and on the second night after that, she began to sing, to dance around the room and to talk about angels, who she could hear singing. The next day she mistook her husband for a physician she knew. The hyperkinetic motility psychosis has developed, as it often does at the end of the puerperium, which, as we learn, is perfectly normal; and the patient is therefore an example of the falsely named 'puerperal mania' [Ed], which in reality covers all manner of acute psychoses, pure mania being the least common.

Gentlemen! Chance has favoured us, in that I can present another patient, in whom you will see the florid stage of a hyperkinetic motility psychosis. You witness the patient entering, dancing a waltz step and singing a waltz melody. She then taps the crown of her head with the flat of her hand and says 'Holy water', bows, and repeats the word and the same gesture five more times. She correctly interprets the gesture I make with my hand, inviting her to take a seat, and suddenly sits down in the chair. However, she soon stands up again, bends forward, and throws her head

forward so that her loosened hair falls over her face. She repeats this rhythmically about 20 times. Then she walks round, her body bending and swaying, busily gesticulating and talking incessantly, with regularly accentuated steps, reminiscent of the enforced exaggeration in the expressive movements of a minuet. The rhythm of such dancing, hopping, and jumping whole-body movements is remarkably exact, when pushed to the limit and, in their execution may indicate great expenditure of energy. They are accompanied by movements of the arms, expressive and correspondingly energetic. Her face also displays an exaggerated countenance; she rolls her eyes, makes an angry face, and then a haughtily repellent, or comical one. She makes threatening movements, attempting to strike—but not in earnest—these being deflected immediately by herself. At the same time she makes several interconnected assertions, at one point: ‘They (or you? not decided) must be chopped up at the stake’. On the whole, her mental state, like her movements, seems to be very unstable, sometimes extremely happy, then haughty or irritable. In general she cannot remain in one place, or can do so only for a moment; at one point, when asked “Why do you dance? Are you happy?” she promptly answers in the affirmative. Then, when asked ‘Do you know who these gentlemen are?’ she begins to sing, ‘So might Heaven forgive you’.

The connection between her spontaneous, almost-continuous speech movements and her other movements is most extraordinary. It is shown in that her voice is often raised, matching the rhythm of her general movements; and, this happens to a greatly exaggerated degree, as are her movements. Thus, much of what she says is incomprehensible, or she gives voice to no more than fragmentary sentences or isolated words or syllables. Furthermore, the content of these isolated fragments of speech is often connected conspicuously with the movements. Thus, she adopts a military bearing, makes the movement of stroking a moustache with her right hand, and says in a guttural tone ‘Lieutenant of the guard’. On another occasion she raises her arm, bent at a right angle, opposes the tips of thumb and index

finger with the gesture of the gourmet, and says ‘Roast pork’; or she extends her arms and hands and says ‘I still have ten healthy fingers’; or, while she has her arms outstretched and sways her torso: ‘How can the tailoress balance?’ Evidently these movements completely divert her attention, so that only momentarily can it become focused. Moreover, you have seen that incidental sensory impressions divert her, and lead to movements, although mainly she ignores my questions and requests. Nonetheless, when she has been enticed to sit down, limiting herself, in silence, to theatrical hand movements, and I say to her ‘she can go now’ [Ed], she at once comprehends this correctly, and stands up.

Gentlemen! This patient, a 36-year-old unmarried tailoress, also looks pale, emaciated and worn out, quite a natural consequence of the effort she has expended in almost-continual, unchosen movements. She has been in this same state for 5 weeks, varying now and then only in intensity. Sleep can be induced only by hypnotics, of which hyoscine seems especially effective; food intake is inadequate, and is disrupted by her motor restlessness.

With regard to this patient’s clinical history we have learned the following. Psychoses or severe neuroses have not occurred before in her family; her father died of consumption at age 52. She had been a poor student at school, but was industrious, very honest, and had led an orderly life. She carried on a tailoring business with her sister, and has probably overworked; and over recent years she also suffered from *menstruatio nimia* [W]. Eight years ago, she had been depressed for 3 months, probably with melancholia; at any rate, she conveyed feelings of unhappiness, spoke with self-reproach, and at the time her relatives had noticed peculiar ‘knotting’ [W] movements of her hands. Afterwards she had been healthy, except at the times of her menses, when she always became markedly irritable and sensitive. Eight weeks prior to admission she had a 2-day premenstrual attack of ‘frenzy’ [Ed], in which she talked and sang constantly, always in motion, throwing furniture about, and had terrifying visual and auditory hallucinations, with verbigeration, occasionally mistaking

people and her surroundings. From the family's description, she had very prominent hypermetamorphosis at this time. With onset of menstruation she quickly became quiet, and slept spontaneously. Four weeks later, menstruation passed without disturbance. Two days before the next menstruation, which was exactly 4 weeks later, admission to the clinic became necessary because of a fresh attack of frenzy, after having spent 2 days at home in this state. This time, appearance of her period had no influence on the illness. To-day, at this demonstration, she should have menstruated again, for it is 5 days over the 4 weeks since her last period, but this time, menstruation seems delayed or not to be happening at all.

Gentlemen! These data are of special value, because they show us a definite, though rather imprecise, influence of menstruation upon the origin and decline of psychoses, and—I must note here—that this is not an isolated experience, but recurs so often in hyperkinetic motility psychoses that we need to recognize it as, by far, the most common type of menstrual psychosis. In particular, hyperkinetic motility psychosis is more often of menstrual than of puerperal origin. I return to these aetiological circumstances later.

Gentlemen! Strange and outlandish as are the movements that you have seen in our patient, they might leave you suspecting that they are—in part at least—voluntary productions of a hysterical-histrionic personality. Admittedly, there are no hysterical antecedents, and the fact that being left alone has no influence also contradicts this, for it is not clear why a hysteric should continue such performances when there are no witnesses. Finally, there are patients' own statements made after they have recovered—or when they become calm just for a while—that these movements are independent of their volition, the result of some incomprehensible kind of coercion interpreted in various ways. However, you will reasonably ask for positive signs, to allow such *pseudospontaneous movements* [W] to be differentiated from deliberate productions. There actually are such signs, as you have seen in our patients. A certain uniformity and monotony of these movements, their tendency to recur with

the same pattern of movement, perhaps increasing to rhythmical repetition, will be especially striking to you. It is manifest also in verbal performance, and has repeatedly led to verbigeration in our patient. Second, you will not have missed the exaggerated, violent, and to some extent affected character of these movements, along with the unusual muscular effort with which they are connected, giving some of the movements a grotesquely graceful appearance. In our patients this is also noticeable in their speech movements; and this is not always limited to pseudospontaneous movements, being occasionally incorporated into expressive ones, like laughing, crying, and singing. You will probably remember the patient (p. 75) who apologized for her song, irreproachable in itself, that she had to sing, a production in itself perfectly proper; but she had to sing it, even though she did not want to. Finally the evident aimlessness—and absurdity—in the form of her movements, must be emphasized, for instance, when the patient repeatedly placed the flat of her hand on the crown of her head, or spread her fingers, or rhythmically bent her body forward, or balanced on one leg, etc. This aimlessness differentiates pseudospontaneous movements from the so-called 'occupational deliria' [Ed], usually connected with compound hallucinations, repetitive to the point of perfection, and also from a psychosensory component of conditioned reactive movements (as in alcoholic delirium) driven especially by cutaneous hallucinations. However, when the movements resemble gymnastic exercises, as we often saw in the past semester, you find them here, in our clinical demonstration, totally out of place and evidently aimless.

Gentlemen! Closer analysis of the pseudospontaneous movements brings anecdotal evidence to our notice, namely that the movements are not psychologically motivated, but are a consequence of disordered identification between *Z* and *m*, that is, on a psychomotor pathway. Items of clinical evidence, which are only occasionally prominent in our case, lead to the same conclusion, in so far as the patient spoke a lot—although in many cases of hyperkinetic motility psychoses, this will confirm the diagnosis almost at first

sight. The evidence is that the motor impulse of hyperkinetic motility psychosis is accompanied not by corresponding loquacity, but often by the opposite symptom in the speech domain, namely mutism. A striking contrast always exists, a lack of proportionality between the mild degree of loquacity and the severely affected motor impulse. As you can see, this is the direct opposite of mania, where loquacity predominates and the motor impulse retreats in proportion, or is manifest more as a 'desire' [Ed] for activity. But if pronounced loquacity exists, which is commonly the case, the changed form of speech shows that it originates from a psychomotor disorder of identification. Its undifferentiated form leads to verbigeration, or at least to conspicuous repetition of the same words or common phrases; excessive expenditure of effort leads to unmotivated crying or howling; the aimlessness in gratifying the vocal motor impulse leads to senseless stringing together of words, and of words or syllables not even related by sound. In general the signs of psychomotor loquacity—unlike those of an intrapsychic disorder—are monotony and incoherence rather than flight of ideas. A further sign referring to content is provided by the hypermetamorphosis which is hardly ever absent in hyperkinetic motility psychosis. The following reproduction of the spontaneous utterances of a patient may illustrate what has been said:

Scullion or bubble, then it begins to bubble or to burn, or with others, ah, Jesus, says my Mutho, always from the beginning, if she was so small, ah so, ah, Anna, a, n, a, in the height, or so much drops from above, ah, Jesus, I findest thou, ah, Jesus and hence because she scullion, getel or gattel or Philadelphia or America or in Tyrol or the or doubles, ah, pocket pistol with and without a bang, since the matter is so, oh, Jesus, Jesus, it goes once, 2, 4 therefore so much even as one once goes to me so, so straight out, then 2, 3, ah, Jesus, ah indeed, that is very fine, that is called counting, the first, the first little song, oh Jesus, consequently one says work or destroying angel [strangling movements!] [to the attendant:] I might take away the cushions, for so many things, ah, Jesus, little star, her little child, come oh, come, oh not yet, just the same. Stop, what is it, what is it that comes from my home, ah, Jesus, ah, ah, ah, or from my school friend from the beginning either from Hanke, Anke, kekeke...

Difficulties in diagnosis are created only by milder or mildest grades of such pseudospontaneous *psychomotor loquacity* [W]. Any intention to continue with a coordinated form of speech then opposes the psychomotor impulse, with results which are very characteristic for specialists. Falsely placed pathos, singing, or declaiming, or an unctuous tone of speech with frequent elevation and lowering of pitch, and an increased rhythmic tendency, might lead one to ascribe such productions to a 'pulpit orator' [Ed] with their marked impact—even as far as the content. However, the content also shows itself to be influenced, apparently by the altered form of speech, just as the form of the motor impulse in our patients shows an influence on its ideation; for it is pre-eminently biblical, or at least is connected to passages from the Bible, verses of hymns, explanations of catechisms, remembered sermons, etc. A patient of this type found that her talk 'dripped from her lips like honey' [W]. For the sake of completeness I should mention that the monotony of content, the tendency to repeat the same words or phrases, also hold true. You see, gentlemen, that psychomotor loquacity in each case presents signs enough for it to be readily identified as such.

Gentlemen! The importance of this subject requires us to examine in greater depth the sort of movement executed in hyperkinetic motility psychoses. In general, movements range between two extremes, at one time appearing totally deliberate, yet in contrast, also totally involuntary, evidently occurring as an imposition on the patient's intention. As an example of the former type, I remind you of the acutely ill young man, who I presented in the previous semester, mute, with a congested face, who, with visible effort, performed regular gymnastic movements of arms and trunk for 10 min. These movements were so precise and apparently purposeful that you might doubt that they were involuntary performances by the patient. After a few weeks in this hyperkinetic state, which was sometimes replaced by akinetic phases of apparent exhaustion, he became calm, but at the same time with rapid increase of feeble-mindedness, while his greatly-reduced nutritional status gave way to a rapid

increase in body weight. At present, you would scarcely recognize this ruddy, apparently profoundly demented patient, instantly refusing—and unbidable towards—any demand to think. The contrast is provided by evidently *unintentional* [Ed] movements, reminiscent of the familiar jactation of unconscious states. Common to both is only the monotonous recurrence of the same form of movement. I was able to present a remarkably pure case of the latter in the winter semester of 1891. This moderately well-nourished, perfectly self-possessed, and thoroughly attentive and oriented 79-year-old patient, Mrs. W., claimed that her illness was constituted entirely by a peculiar motor restlessness. On awakening each morning this was only slight, but it increased slowly during the day, reaching its high-point in the evening, so that the patient could not rest for half the night—until finally she fell asleep from sheer exhaustion. My *Assistant* [W] at the time, Dr. Kemmler, left me with a splendid description of the style of her motor impulse. I want to convey only the essentials here:

Patient sits in bed, but constantly changes her position; first she tries to move to the upper edge of the bed, then to the lower, or tries a position on the side, or raises herself up as if she would try to stand, then tries to get out of bed. These movements follow one another in extreme haste, usually one movement is not completed before the next begins, often a movement entirely contradictory in nature. Pauses for rest hardly ever happen. In her haste she always and incessantly makes the same futile efforts and the same movements. The patient's assertions, which accompany her restless impulses, confirm our assumption that she can find no position or posture in which she feels comfortable, as though every attempt to take a certain position evokes an unpleasant feeling, of which she would pay any price to rid herself. She is forever trying all possible means. Assertions such as: "I do not lie right like this, I cannot remain so; I must lie quite differently; I cannot remain sitting like this; I can't abide this; I must get some rest; if I could only stand up; if I could only lie down; but it doesn't do, perhaps it would if I don't lie down at all", etc. In her helplessness, she appeals to everyone for help, and finally moans like a person in despair. If anyone approaches her, she immediately claims their assistance. For example, she grasps the doctor's hands, lets go of them, immediately grabs them again, supports herself on his arm, clings firmly to his sleeve, and promptly ceases

from every attempt. "Ah no. It doesn't work like this. You must help me differently. You are doing it wrong. If you would hold me like this", are characteristic comments. If you ask the patient how you should help her, she replies, "That's just it, I can't find out". The presence of the doctor or attendant always has a somewhat calming effect. Patient begs that someone should always be there, then it would be better for her. It is noticeable that the patient very often makes a movement entirely contrary to her stated intention. Thus for example, she decides that she should be laid down, and then always raises herself on the arm of the person who would help her. Or she wants to stand up, and makes no effort to rise. Her corresponding assertions leave us in no doubt about this: "Ah, that is not what I wanted at all; it should have been something totally different. I would gladly lie down so that I can sleep, but I do not know how to begin to go about it. For God's sake, what should I do to sit down?" She sometimes struggles directly against the very help for which she has asked. To a spirited, earnest request to desist from her movements, she is quiet for a time and feels visibly relieved. Likewise, it is seen that she can voluntarily perform all movements on request. However, a few minutes later her old movements begin. At the height of her motor restlessness she is entirely absorbed in her movements, and it is hard to fixate her attention. She then repeats the question instead of answering it, or uses rambling speech and thus loses the sentence construction, or leaves the sentence unfinished. In between times assertions like: "I will tell you afterwards what I cannot think of at the moment", etc. On one occasion the patient was even unable to give her name; on such occasions she shows her annoyance: "I know it perfectly well, but because of my restlessness I cannot speak it now". A portion of the patient's movements resemble a familiar example of so-called occupation delirium [Lecture 26]. Thus for example she occupies herself constantly with the bedding, pushes the covers off, pulls them up, covers herself, then uncovers herself. She also busies herself with her items of clothing; she puts it all on, or puts some of it on, and takes it off again, often with the wholly unplanned result, so that she sits there naked, and then complains, because it was so improper. While she utters a certain intention, she quite often does the opposite. One night she was very restless, constantly pushed the covers off and then expressed the desire to be covered, because it was so cold. When she was assisted and covered, she suddenly became perfectly quiet and soon went to sleep. Evidently she was unable to start the sequence of actions—sit up, grasp the covers, lie down, and draw the covers up—in order to unite them into a single action. Given a pencil and paper to write, she was able to accomplish just as little.

As already mentioned, restlessness ceases when she is earnestly admonished; similarly, when she performs some complicated movement on command—in which she is always successful—or when she is keyed-up to be attentive and impart certain information. Patient shows that she is talkative, in part garrulous, but without real loquacity. Now and then an expression fails her, especially in finding the word for verbs and abstract ideas, her prolixity then often serving to circumscribe or seek out the correct expression. When she is asked the reason for her aimless movements, she showed a certain insight: “That must lie in the nature in such a way that is just a misfortune. I do not know what it is for”. Patient denied many movements after she had performed them. For example, she speedily pulls off her jacket and then claims that she could not have done it at all; another time, “that can only have been an accident”. She puts a stocking around her neck and says that it is not a proper necktie. She turns the second stocking inside out and suddenly pulls it over her head like a cap; she is herself astonished at this moment, and pulls it on properly, over her foot. On request, she protrudes her tongue hesitatingly and spasmodically. Frequent verbigerating repetition of the same phrases, e.g. “Oh God, pity me. Please help me do right”. Never hypochondriacal sensations, always perfect orientation, good memory and ability to be attentive.

After becoming quiet, a good disclosure: An uncomfortable feeling might have caused the movements, they could not have been voluntary. The uncomfortable feeling was located in the chest and gradually affected the whole body. At the time when the motor restlessness abated, indications of delusions of relatedness: Another female patient had behaved so peculiarly, that one could not get any rest—she must probably have lain on the bed, so that she could get no rest. In the morning she begged for a hypnotic, but immediately said she did not want it at all. Claimed that she was cold; at once asserted the opposite. Once said, quite aimlessly: “Can I sit up now, or can I eat something first?”

Female patient, previously healthy, had been in the public hospital. The last four weeks before her admission (on 12 September, 1891) often sleepless and complaints of headache and increasing weakness; a few days before admission the ‘twitching’ [W] began, as she called it. That she therefore had been considered mentally ill and brought to the lunatic asylum displeased her greatly. Motor restlessness soon attained the severity just described, and continued, except for a slight remission between 21–25 September, until the beginning of October, to be replaced in a few days by complete quiescence until 6 October. A relapse began 27 October, and increased in range and intensity until 17 November. On 18 November the severely-

exhausted patient presented fever and symptoms of pneumonia, and died 22 November. An influenza epidemic prevailed at that time. The relapse then began, repeated assertions that the patient herself did not know what she really wanted, and that this might be just as remarkable. Soon again great helplessness in the choice of motor means. Transitory and half-corrected negative-impact ideas: She was being jeered at, laughed at, tormented, also mistrustful of those around, fretful, irritable in mood. Initially, only the impulse to get out of bed; later, motor impulse of the hands; and loquacity only after increase of the motor impulse from 1 November. This time, modification of respiration, which was of a gasping character as in extreme anxiety. Yet anxiety itself was always denied. Paraphasia in loquacity this time more pronounced; nutrition more impaired; the whole attack more severe and increased to temporary fear of approach. Never hallucinations; hypermetamorphosis never marked. Allopsychic orientation only temporarily disordered during extreme restlessness. In the last days before the rapid decline of the illness, flinging, twitching of the arms, which disturbed even voluntary movements. Otherwise, forcible attraction of her attention had a quietening influence similar to that in the first attack. The following sample of her loquacity, from 4 November, shows that ideas of anxiety did exist: “My dear doctor, I am entirely wrong; oh, God in Heaven pity me; Father in Heaven, pity me. Good doctor, help me. Let me out. Heavenly Father, do not forsake me. I am not able. I am perfectly right. You are compassionate. I cannot do differently, oh, dear God. No, no, no, I must go, be merciful. Doctor, you are merciful. Ah, Jesus Christ, pity me. I fail in everything. I have a false judgement. Further on nothing is important. Be merciful to me a sinner. Oh, doctor, forgive me. I will gladly follow, here I am damned. You do me great wrong, pity me. Now I stay. Yes, oh, my God and Father, do not forsake me. Doctor, I am unable to save myself. I earnestly pray, do what you will. I am entirely innocent. Thou all good God, pity me. Heavenly Father, pity me. Dear, good doctor, listen to me. Good God, stand by me; pity and be gracious to me. I am a sinful person. Oh pity me, Lord, pity me”, etc.

This case is so instructive in many ways that we must linger with it awhile. First of all, it is extremely rare, that a hyperkinetic disorder of identification in the psychomotor tracts is so pure, and uncomplicated by other symptoms. I remember a similar case of a clerk K., 21 years old, who was admitted 27 December, 1894, and released to a provincial mental institution on

21 March, 1895. He had previously manifested a hyperkinetic state for several days, after a spree of excessive drinking, with explanatory delusions of being a gymnast; and he was therefore treated by us for 17 days in November, 1894. It was noticeable that, in this patient, there was no recurrence of rhythmical movements; he was perfectly oriented and no explanatory ideas accompanied with his movements; and he was so conscious of the fact that his attention had been engaged coercively by the movements, that he often answered questions: 'At once', or 'wait', or 'I must first...' In this patient we deal with the same sort of movements to be described in greater detail later. However, this condition intensified further, to a peak of complete confusion, during which he was incapable of remaining fixed in any one place. This was also always accompanied by very severe hypermetamorphosis, unlike the patient previously described. Here the course was not continuous, but the patient had a perfectly lucid interval, with insight into his illness, and signs of exhaustion from 17 to 26 January, 1895, and a second such spell, for just 1 day, with extreme exhaustion on 6 February. We found out later that this patient, after staying for a year in the mental institution, was discharged home. I am indebted to my colleagues for the following information: His illness was recognized in the institution as remitting mania (naturally not mania in our sense); periods of manic, even stormy excitement alternated with ones of calm, where he was still more-or-less confused. Later, the manic paroxysms became shorter and less intense; in periods of quiet his 'presence of mind' [Ed] gradually increased; and insight into his illness developed; the patient improved physically, with a marked increase in weight. From November, 1895 he could be regarded as convalescent, but as a precaution, his being detained in the institution continued during the winter months.

This is the same patient, moreover, from whom the examples of motor loquacity, given earlier in this lecture (p. 227), were obtained.

As for the type of movements, the motor impulse in both the last two patients can be characterized as reactive, while the patients presented first were shown to be executing essentially

initiative and expressive motor impulses, just as in gymnastics. The movements in patient W. probably resulted reactively from uncomfortable muscular sensations; this was also largely the case in patient K., although, according to his assertions, there were additional abnormal physical sensations, including a 'tingling' [Ed] throughout the body and pressure in his throat. Transitory panting, blowing and emitting of inarticulate sounds can probably be traced to that statement. In any case, these are aberrant organ feelings, which are the basis of the reactive movements. The similarity to occupational deliria, an intrinsic part of the movements seen, can be easily understood from this point of view, because occupational deliria also arise as reactive movements. However, we will not go wrong, if, in our cases (in contrast to *Delirium tremens* [W]) we interpret the patients' manipulation with randomly presented objects as not actually being induced by these objects, but rather, assume that patients merely take the opportunity that they offer, to discharge their motor impulses in relation to these objects.

The name *jactatoid motor impulse* [W] might be applied in these cases. The similarity of the movements described to those of jactation in an unconscious state is evidently based on the fact, that jactation also is produced by unpleasant organ sensations.

The Affective state was much clearer in patient W. than in the other patients. It is that of 'motor disarray' [Ed], admittedly increased transiently to the point of actual anxiety and despair. Ideas expressing anxiety dated from this time of maximum intensity. We should also regard the temporary occurrence of random, uncoordinated movements as signs of increased intensity of the disease process, while on the other hand, when the illness was significantly abating, an undoubted contradiction was seen with the volitional intentions of patients, which were always soon able to correct the uncoordinated movements.

Gentlemen! It might not be superfluous at this time to mention that severe generalized chorea, which we usually place among the functional nervous diseases, is not so far removed from our topic. Of course, chorea can no longer

be understood as a disorder of psychomotor identification, since it exceeds this by far, in that it may exhibit random performance of individual movements, and thus impairment in innate muscular coordination. From the perspective of differential diagnosis I should not omit brief mention of the signs otherwise linked to cases of severe generalized chorea. Corresponding to such discharge of muscular coordinations, patients with chorea also show symptoms of severe paralysis: during pauses in involuntary movement, the head usually drops in a quite unrestrained manner; the trunk can show the same instability, so that standing, walking, and sitting become impossible. If these patients are raised to their feet, they present a picture of most severe ataxia in their every effort to move. Moreover, in such cases, speech generally gives way to stammering and becomes unintelligible, and swallowing may be impossible at times due to paralytic lack of coordination of the tongue. On the other hand, a choreic impulse to crying and uttering of stammering sounds is occasionally manifest. It should be generally known that such cases of severe chorea are very commonly attended by certain manic symptoms: loquacity, flight of ideas, notable lack of embarrassment and thoughtlessness, for instance on matters of seamliness, etc. On the other hand, an abnormally irritable mood and irascibility may prevail [1].

Gentlemen! Knowledge of descriptions of severe generalized chorea, known for example as a dangerous complication of pregnancy, is all the more important in differential diagnosis between it and hyperkinetic motility psychoses, since transitions between the two states occur quite often, as our Case W. proves. We can then designate the form of hyperkinesia observed there, as a *choreic motor impulse* [W]. We can characterize it as an increase in hyperkinesia or, in other words, an overlap of the domains of primary identification. The combined magnitude of motor manifestations (pp. 32, 33) shows itself to be a threat to survival. Such a choreic motor impulse, which actually goes beyond the concept of hyperkinesia, is seen particularly in epileptics and paralytics: In the former it is a component symptom of profoundly dazed conditions, usually

post-epileptic and of short duration, lasting a few days at most. In paralytics it is seen in two opposing states, depending on whether it is the initial or terminal stage of the illness. In initial stages of paralysis it corresponds to a mild degree of choreic motor restlessness, which may be largely unilateral, resembling Chorea minor. In terminal stages it is usually a matter of blind rage continuing for weeks; generally movements of the torso, usually performed mutely, apparently in a dazed condition.

Certain *impulsive actions* [W], evidently provide contrasts within these irritative states, and encroach on the motor projection field; their hyperkinetic mode of origin is beyond doubt, according to patients' statements, but also derived from the context of the whole illness. I observed a disease in a 28-year-old, unmarried woman, who presented the same condition unchanged for about 2 years, with certain remissions. During this period, she required constant supervision because, totally without provocation, she was inclined to violent acts—would strike out, throw knives and forks, or pull hair—usually against her female companions, towards whom she was, in fact, well intentioned. These impulsive acts occurred repeatedly, without any external provocation and wholly unexpectedly, and were therefore dangerous. Apart from that, in intervening periods she was perfectly calm and rational, could always be kept in her home, and only occasionally presented smacking movements of her lips, and another symptom that was particularly offensive to her and her relatives, the involuntary utterance of obscene words (*Coprolalia* of other authors). The patient was unable to suppress this, but was able to utter them half-audibly, or her attention could be diverted. This patient suffered an exacerbation of her condition over 8 days, in which a severe choreic motor impulse, as we defined it above, was continuously present. She usually muttered half-audibly and unintelligibly, then suddenly and spontaneously would raise her voice to hurl some insult or obscene expression. Just as suddenly and impulsively, the motor impulse was also interrupted by coordinated actions, in which she suddenly struck, scratched, and pulled the hair of people round about.

The state of exhaustion following this acute attack led to an improvement, which gradually passed into complete recovery.

In this case the impulsive actions, like the speech movements, plainly showed their origin as purposive schemata arising during aberrant irritation, and the patient herself stated later that she had definitely never heard voices or commands. We would do well only to differentiate this type of action, arising within psychomotor functions. Actions brought on by hallucinations or other sensory drives, even if they also occur spontaneously, evidently do not belong here. Especially characteristic of these impulsive actions however, is their kinship with the course of a definite state of psychosis. They then readily become the source of complex explanatory delusions. Thus the first attack of patient K., mentioned above (p. 230), which lasted only 3 days, consisted essentially of his performing gymnastic movements, which led him to imagine being a gymnast, and to develop a sort of grandiose delirium in respect to his personal capacity. Another patient, a 17-year-old baker's apprentice who had always been very pious, suddenly felt the need to kneel down and pray, and he interpreted this as a direct influence from God. A sort of religious grandiosity developed from this, with the admixture of other motility symptoms. He recovered completely. However, it became difficult for him to regain insight into his illness with respect to the first events, and this was delayed, so that such occurrences were still familiar to the patient at the time of complete recovery. Finally I call to mind the doctor of philosophy, who so drastically described to you the events that had taken place prior to his admission. He had suddenly knocked the hat off a totally unknown gentleman, with his cane. This gentleman, a perfect stranger, actually had nothing to do with him, but Dr Sch. claimed that the gentleman must have been a real blackguard, for the dear Lord had suddenly brought about an unpremeditated movement by the patient, raising his cane against him. This topic was on the mind of one of the patients, who believed himself to be continuously hypnotized in the institution (p. 86).

The jactatoid motor impulse of Mrs W. might remind casual observers of cases of disease that bear a superficial resemblance to hers, but are totally different in character. Perhaps we can differentiate a disarrayed motor impulse more correctly by designating it as *disarrayed motor restlessness* [W]. In such cases an intense Affective state of disarray leads to various movements, such as changes of location, restless wandering around, movements of embarrassment and despondency, and to monotonous moaning, clinging to others, etc. These movements have all the signs of psychological motivation, even though they are mediated by an Affective state that may be foreign to normal mental life, as, for example, in somatopsychic disorientation.

Earlier (p. 157) we became acquainted with motor discharges that bore the stamp of senseless rage, as an expression of somatopsychic disarray. The life-threatening movements, motivated in the strange ways of hypochondriacal patient N (p. 159) belong here.

This aimless motor impulse therefore has a basis totally different from that described above (p. 157). In the latter, movements are primary and lead then to disarray. This relationship is also fully expressed in the type of movements. On the other hand, in motor impulses with disarray, the relationship is the other way round: If disarray increases to the point of anxiety and despair, as it does in acute psychoses with an entirely sensory basis, resulting motor manifestations can be understood psychologically, presenting even fewer difficulties.

Gentlemen! For the sake of completeness, I want finally to discuss a type of motor impulse, which is furthest removed from the motor domain, although it is often observed in hyperkinetic motility psychoses. We can indicate it as *hypermetamorphic motor impulse* [W]. The same process, which directs attention to immediate sensory impressions in an imperative way must, of course, often lead to movements matching these sensory impressions. Thus for example sight of a washing jug and bowl, or a slate brings patients to wash themselves, or to write on the slate. In this way rapid alternation of different actions may be produced, giving the appearance

of independent motor impulses. Hyperkinetic motility psychoses, which as already mentioned, are almost always accompanied by hypermetamorphosis, occur in rich combinations with such movements, but also with various states of delirium, as for example in those of progressive paralysis. If sources of hypermetamorphosis are removed by seclusion of patients, such motor impulses subside quite predictably.

Gentlemen! I might use this occasion to set before you the wide diversity of conditions which can induce excesses of movement amongst mentally ill people. You know that more-or-less frenzied behaviour is very common among those who are acutely mentally ill, and may be due to most varied causes. Yet the term 'frenzy' [Ed] implies no kind of diagnosis: It is merely the broadest, best-known, popular expression for a state of restlessness.

Gentlemen! A review of all conditions that may lead to frenzied behaviour amongst mentally ill people will have shown you that concise definition of hyperkinetic motility psychoses faces some difficulties. Therefore I have presented detailed examples of several cases of special 'purity' [Ed]. Always the primary fact, that the movements are not motivated psychologically, and that a manifest impulse to such movements exists, must provide us with the main criterion. But it is in the nature of things, that illness, especially if it is severe, greatly interferes with any closer analysis of how far falsifications of content of consciousness extend, and are not mere consequences of movements; and even the information patients give us subsequently about their condition is often insufficient, because memory deficits may obscure part of the period of a patient's illness. It should then be expected that some cases belonging here are more than pure hyperkinetic motility psychosis, although they are understood in this way, according to signs described above.

If the purest cases possible are taken for guidance, the following may be said about the *course* [W] of the illness. The disease seems to be distinguished by the fact, that it recurs over a number of periods—four, in patients previously mentioned—and then exhausts itself and ends in full

recovery. The course is, therefore, periodic and intermittent, with a very rapid sequence and at least short periods of remission. This periodicity is not perfectly regular. One attack, usually the first or the second, is more protracted than the others, and may be brought about by coincidence of two attacks. Prodromes often precede the first attack. These may consist of subjective troubles of various sorts, such as headaches, disturbed sleep, periods of anxiety, and inner restlessness; vasomotor troubles are especially common. The attack itself tends to begin quite suddenly, especially when periods of illness have preceded it. The duration of an individual attack is usually less than a month, except for protracted attacks, which usually correspond to the peak of the illness. Here I want particularly to emphasize that the so-called 'periodic mania' [Ed] of some authors belongs, in most cases, amongst the hyperkinetic motility psychoses.

Aetiologically, the periodic event of menstruation bears the closest relationship to our illness. Next most often, it is found among postpartum women, as the 'puerperal mania' [Ed] of other authors. This corresponds to the fact that the majority of persons so affected are women, and are young. If however the illness occurs in males, it shows a similar periodic, intermittent character, which therefore cannot be exclusively of menstrual aetiology. Common cases with paralytic aetiology provide an exception to the periodic course.

For *differential diagnosis* [W], in essence, we need consider only 'confused mania' [Ed], which usually is similarly periodic and recurrent; and this is to be studied in more detail later. In favour of the latter, a decisive fact is when the hyperkinetic clinical picture is merely an augmentation of pure mania and has demonstrably risen out of it. Moreover, mania is the only illness that presents an actual transition to hyperkinetic motility psychoses, and thus has an internal relationship with the latter. As a consequence of this relationship, differential diagnosis between the two diseases is sometimes impossible. We shall deal with this further when discussing confused mania. Later, we will get to know hyperkinetic motility psychoses as a phase of cyclic motility

psychosis, and of periodical hyperkinetic states in the course of a total motility psychosis.

The *prognosis* [W] of the disease is generally favourable, and, as I must state, at odds with most authors, since, with careful treatment, after a number of periods, most cases end in complete recovery. The hereditary or degenerative predisposition which is usually present does not alter this view. Corresponding to preceding ill-health, puerperal hyperkinetic motility psychoses are usually more severe than the menstrual ones. Bromide treatment, as recommended by Krafft-Ebing [2], has never achieved anything substantial in my experience, nor has it in cases of menstrual psychoses. Moreover, the special aetiology is thoroughly decisive for the prognosis, so that the paralytic form here leads to dementia, as it does in other paralytic psychoses. This is true in cases of hyperkinetic motility psychoses, which occur in the course of a real hebephrenia or other chronic, hebephrenic degenerative psychoses. The dangers of hyperkinetic motility psychoses are chiefly the loss of energy from the continued muscular exertion, and the ever-present insomnia; and the continuous motor impulse adds essential impairment to nutritional status. States of sudden collapse are therefore commonly seen. Furthermore, there are injuries that patients incur through their violent movements; in particular, there is difficulty in carrying out aseptic treatment of these injuries.

Only in rare cases can *treatment* [W] be based on aetiology. I remember a case of this kind,

corresponding to the boundary between our disease and confused mania. It was that of a 15-year-old girl, who had not yet menstruated, but repeatedly presented vasomotor symptoms of a worrisome nature. Periodical recurrence of attacks about every 4 weeks and the added vasomotor symptoms in these attacks persuaded me to apply leeches to the inner surfaces of both thighs during the third intermission, whereby the first menstrual flow was actually established, and further attacks prevented. The girl has remained healthy since then (about 8 years ago). Use of narcotics in the hyperkinetic motility psychoses is generally contraindicated. Almost all sleeping pills fail. Hyoscine seems to have a specific action on motor hyperkinesia, often in surprisingly small doses of $\frac{1}{4}$ – $\frac{1}{2}$ mg. administered subcutaneously. Owing to this sedative action hyoscine is also the best hypnotic in these cases. Apart from bed rest, in so far as it is practical—use of warm baths, prolonged over several hours, and permanent under certain conditions, usually has a favourable effect. Hospital treatment can only very rarely be dispensed with.

References

1. Wernicke C. Krankenvorstellungen aus der psychiatrischen Klinik in Breslau. Breslau: Schletter; 1899. vol 2, Case 13 is a typical example of severe chorea.
2. von Krafft-Ebing R. Lehrbuch der Psychiatrie auf klinischer Grundlage für praktische Ärzte und Studierende. 4th ed. Stuttgart: Enke; 1890. p. 572–3.