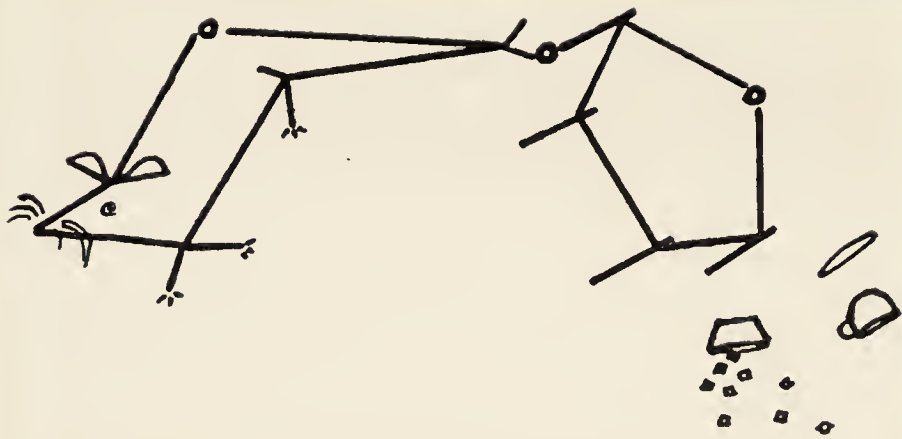


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A Practical Essay on
Hemeralopia, or Night-Blindness
commonly called
NYCTALOPIA.....

By

R.W. Bampffield.
1812



John Yudkin

CASES

OF

PERIODICAL JACTITATION,

OR

CHOREA.

BY ROBERT WATT, M.D.

LECTURER ON THE THEORY AND PRACTICE OF MEDICINE,
IN GLASGOW.

Read February 1, 1814.

WE are informed by Horstius, that some women, whom he describes as being disordered in their minds and affected with a peculiar kind of restlessness in their bodies, repaired once a year to the Chapel of St. Vitus, near Ulm, and continued there night and day leaping and dancing, till they were so exhausted as to drop down almost dead. Thus, continues he, they were restored and continued well till the following May, when the same propensity returned, and required a similar course of exercise to remove it. From this tradition, the convulsive disease to which children are liable, is said to have derived its name; and though considerably different in their phenomena, yet the two affections are perhaps nothing more than different species or varieties of the same disease.

Having lately had an opportunity of seeing one of these restless patients, I was induced to take the following notes of the case; which I now beg leave to submit to the Society. But before proceeding, I may remark, that there appears evidently to be several species or varieties of this disease, all of them characterized by an ungovernable propensity to motion, and all of them removed or mitigated by particular kinds of muscular exertion.

A disease of this kind occurs frequently in the northern parts of Scotland, and is described in the following terms:—"Those affected first complain of a pain in the head, or lower part of the back, to which succeed convulsive fits, or fits of dancing at certain periods. During the paroxysm they have all the appearance of madness, distorting their bodies in various ways, and leaping and springing in a surprising manner, whence the disease has derived its vulgar name "Leaping Ague." Sometimes they run with astonishing velocity, and often over dangerous passes, to some place out of doors, which they have fixed on in their own minds, or perhaps even mentioned to those in company with them, and then drop down quite exhausted. At other times, especially when confined to the house, they climb in the most singular manner. In cottages, for example, they leap from the floor to what are called the baulks, or those beams by which the rafters are joined together,

springing from one to another with the agility of a cat, or whirling round one of them with a motion resembling the fly of a jack*.”

Cases of this kind seem to differ in their periods. Some of them are annual, as those described by Horstius: some of them irregular as those in the northern parts of Scotland, and some of them daily or oftener, as in the case I am more particularly to describe. They differ also in the kind of motions performed. In some it consists of every species of exercise that can be conceived, as running, leaping, dancing, tumbling, &c.: in others it consists in a simple repetition of the same thing. In some it appears to be accompanied with symptoms of a convulsive nature: in others the motions appear to be completely or nearly voluntary. Perhaps they differ too in point of age, sex, and various other conditions; but these circumstances seem to be less ascertained. Females, however, are naturally more liable to this affection than males, and of the former chiefly those below the age of puberty. The mind in all cases is probably more or less affected.

The first case is that of Mary Wardrop, aged ten years.—This patient was originally rather delicate, but of a lively active disposition, and

* Edinburgh Medical and Surgical Journal, Vol. III. p. 435, and Statistical Account of Scotland, by Sir J. Sinclair *passim*.

an exceedingly good scholar for her age. It was remarked towards the end of the year 1812, that she was not quite so lively, and looked somewhat paler than usual; but these symptoms were so mild and transitory as not to excite any degree of attention.

On the 1st of January, 1813, she was seized with most excruciating headach, accompanied with almost incessant vomiting. Both of these occasionally suffered a slight abatement, but in the intervals she seemed sick and oppressed, and moaned heavily. She required her body to be kept always in a perfectly erect posture. If even the head was allowed in the slightest degree to recline backwards or forwards, or to either side, it increased the pain so remarkably as to render it intolerable. She never lay down till completely exhausted, and at the very point of falling asleep, and on awaking she instantly started up, and remained all the rest of the time in an erect posture. These symptoms continued four weeks with little variation, but during that time she lost both the power of speech and of walking. About the beginning of February she was seized with a propensity to turn round upon her feet, like a top, with great velocity, and always moving in one direction. This motion was continued from morning till night, and required the constant attention of her friends to keep her from falling. Sometimes her tongue was moved very rapidly backwards and

forwards; but this appeared to be voluntary and not convulsive. She was always quite sensible; and during the continuance of this motion, the headach was much abated. She complained of nothing except when interrupted in her incessant motions. She seemed to feel relief, and expressed her satisfaction, when the attendants enabled her to turn round with still greater velocity than she could by her own efforts.

About the end of February the motion ceased, and the headach returned with redoubled violence. At this time, she requested some of her friends to press her head in the most forcible manner, and this appeared to give her some relief. After the violent headach had continued about two weeks, she lost entirely the power of the muscles of her neck, so that the head, when not supported, fell backwards, forwards, or to whatever side the body happened to be inclined. The headach began now to abate, and she recovered her speech so far as to be able to utter a few words, so as to be understood; but in the end of March she was seized with a new sort of motion, and again lost her speech. She now laid herself across the bed, and turning round like a roller, moved rapidly from the one end of the bed to the other. But as she turned always in one direction, when she arrived at this point she found it difficult to continue the rotatory motion, with that rapidity which she wished. As this circumstance gave her considerable uneasiness,

and as her attendants had seen the relief she seemed to experience from assisting her in her former motions, two of them, one at the head and another at the foot, lifted her regularly from the foot up to the head of the bed, from which she rolled down, and was again lifted up.

The fits continued for about two hours each day, but gradually increasing, they came to occupy six or seven. The assistance she required, being of a very fatiguing nature, and the attendants seeing no end to it, determined to give it up altogether. This distressed her very much, but still she persevered, and came at last to turn round without moving out of the place. The friction produced in this way was so great, that she would wear a stout calico night-gown to pieces in a single day. On one occasion they took her out to the garden, where she rolled rapidly from the one end of a walk to the other. At another time, she was carried out and laid in a shallow part of a river, where she was nearly covered with water. In place of making any effort to get out of the water, where she was almost at the point of being drowned, she began to turn round in the same manner as if she had been in bed. At another time, a large bucket full of cold water was dashed suddenly and unexpectedly on her head and body, while turning in bed, but with no better effect. Though entirely wet, she continued her motions till the usual period.

What seemed most extraordinary in this movement, was, that she made little or no use of her arms in turning: indeed they were often rigidly extended by her sides, as in a case of tetanus. Sometimes the whole body became so stiff as to put almost an entire stop to the motion; but when this went off, which it always did instantaneously, the rolling immediately became as rapid as before. She occasionally seemed to experience considerable difficulty of breathing, and would sometimes turn round from twelve to twenty times without inspiring. What appears incredible, but which can be confirmed by hundreds who saw her, is, that even when left to herself, she would have revolved from fifty to sixty times in a minute, and have continued to do so for the length of time stated, except when retarded by the tetanic rigidity of the body. She continued this motion for six weeks.

About the end of April she was seized in a different manner. She now lay on her back, and by drawing her head and heels nearly together, bent herself up like a bow, then allowing them to separate, her buttocks fell with considerable force on the bed. She lay extended on her back for a moment and then repeated the same thing, and continued to do so at the rate of ten or twelve times in a minute, for six hours at first, but gradually increasing, she at last continued it for fourteen hours a day. This motion continued for about five weeks, and was succeeded by another entirely different.

She was then seized with a propensity to stand on her head in the following manner: resting upon her knees and elbows, she placed the crown of her head a little farther down in the bed than the pillow; she then elevated the trunk and lower extremities directly to the roof of the bed, and rested her weight partly on the occiput, but chiefly on the nape of the neck and shoulders; the chin touching, and seeming rather to rest on the top of the sternum; as soon as the body was elevated in this manner, all muscular exertion seemed to be withdrawn, and it fell down as if dead, the knees first striking the bed, and then the buttocks striking the heels. This was no sooner done, than she instantly mounted up as before, and continued to do so from twelve to fifteen times in a minute, for fifteen hours a day.

Such was her state when I first saw her, early in the month of June. The previous history of the case was obtained chiefly from her father, an intelligent and respectable farmer, in Airshire, a man above the most distant suspicion of any thing like superstitious credulity, fraud, or deception. Previous to this, she had been seen occasionally by Dr. Steel, of Kilmarnock, and some other medical practitioners. Dr. S. advised the parents to send her to Glasgow, and furnished them with a letter to Dr. Cleghorn, and myself, requesting us to examine the case, and also to call in such of our medical acquaintances as we might think proper. Dr. C. and I happening to be both out of the

way at the time of her arrival, she was conveyed to the Royal Infirmary, where she remained for a day and a night, and was seen by a number of medical gentlemen. Here she began and continued her motions in the same manner as she had done at home. The day following she was removed to the house of a relative in town, where she continued for other two days and nights, during which time I had several opportunities of seeing her, and making a variety of inquiries, along with Dr. C. and several other medical gentlemen.

Our first visit was in the middle of the day. We were told that she commenced at a precise hour in the morning, and continued till night, that even then she could not stop of her own accord, but by holding her for a few minutes very firmly, the propensity went off, and she became quiet. She was then prevailed on to take a little food, went to bed, and slept pretty soundly. In the morning she had a little food in the same manner, and at eight precisely the motions commenced.

My second visit was at eleven o'clock at night ; she was then going on as we had seen her. One difference, however, was pretty obvious. In the earlier part of the day she elevated both limbs equally, or nearly so, and each time pointed them directly to the roof of the bed. In the evening the left limb was elevated more feebly, and fell considerably short of the perpendicular. We were

told that this difference in the two limbs was scarcely perceptible in the morning, but increased gradually towards night. Some evenings the left limb was not elevated above half way, between a horizontal and perpendicular posture.

The hour was now come for putting a stop to the motions. Her father applying a hand to each side of the chest, lifted her suddenly from the bed, and sitting down, placed her on his knee, and held her fast. For a few minutes, perhaps from five to ten, she struggled very violently, like a child in a passion, forcibly held against its will. The struggle gradually subsiding, she became composed, sat still, and received a little food. The manner of giving the food was to break down the bread into small portions, and put it into her mouth. She fretted every time it was presented; and though she opened her mouth, it was with obvious signs of reluctance. She chewed it with a sort of convulsive rapidity, and swallowed it as a child would swallow a dose of physic. Her food was chiefly a few bits of oatmeal cake, with a little butter, cheese, or ham, and a small quantity of milk. She never took either food or drink except at this time, and immediately before the motions commenced in the morning.

I have mentioned the manner in which a stop was put to the motions in the evening. While we were present in the earlier part of the day, at the

desire of some of the medical gentlemen present, a similar attempt was made. Her father took her up, and held her firmly in his arms, during which she continued to struggle with a degree of fury and desperation, which I would compare only to the rage of the wildest animal I had ever seen held in a similar manner. The attempt was made for a considerable time, but with r e abatement in her struggles for liberty. Indeed her father told us, that on former occasions, it had been tried for a much longer period, and accompanied with threats and even harsh usage, but without effecting any sensible change.

After the period at which her motions were to cease had been ascertained, it was thought advisable to try whether by making it a few minutes earlier each night, the time might not be materially shortened. An attempt of this kind was made a little before she was brought to Glasgow. The first night she was taken up ten minutes earlier than the night before. She struggled a little harder and longer than usual, but at last became composed. The next night other ten minutes were taken off, but she struggled as if she had been taken up in the middle of the day. After continuing the contest for almost an hour without any prospect of success, she was laid down, when she instantly began her motions, and after continuing them for about two hours, she was again taken up in the usual way, and became quiet; but did not

recover entirely her ordinary degree of composure through the whole night.

It was next suggested to allow her to go on till she stopped of her own accord. This experiment was tried a short time after the former. She was first allowed to continue her motions three hours later than usual, after which she did not sleep till she began again in the morning. She continued all the next day and night till within an hour of the time when they usually came on in the morning. She was then stopped, having neither tasted food or drink for twenty-four hours. After taking a little food, as usual, and appearing as if she would have fallen asleep, at the precise time, the propensity returned, and she continued her motions for other fifteen hours without intermission, and without the least apparent fatigue more than usual, at which time she was stopped in the usual way, took a little food and went to rest.

My next visit was in the morning between seven and eight. I found her seated upon her father's knee: she seemed composed, but so timid that I could hardly obtain a sight of her face, and on the least attempt to obtain a sight of her tongue, or of her eyes, she became greatly distressed and agitated. Her pulse was pretty regular and about 90 in a minute; but she would hardly allow us to feel it distinctly. Her eyes so far as I could discern, appeared clear and lively.

After these examinations, the conversation turned upon something else, and nobody seemed to be paying any attention to her; but a few minutes before the expected attack, she began to shew signs of uneasiness. She moved her head in various directions. A sort of distortion of her features seemed to indicate a considerable degree of internal agony. Her lower extremities too suffered occasional spasmodic contractions, and now and then convulsive twitchings and startings. At last as if terrified out of her senses, or in a fit of desperation, she began to grapple and struggle with her father, in the same manner as when he attempted to lift her out of the bed the day before. He now threw her gently upon the bed, when she instantly got upon her hands and knees, and, after an adjustment or two, placed her head in a proper position, and began to throw up her body and limbs as I have already described. For a short time she appeared to be hurried and agitated; but after about a quarter of an hour she went on in the most cool and deliberate manner. She seemed to pay attention to nothing; but this was not really the case, for if any thing was said with regard to herself, such as the giving her medicine, and still more particularly any proposal to stop her motions, she instantly began to whine and fret.

The precision with which she began at a particular hour in the morning, appearing to some people very extraordinary, a variety of attempts

were made to find out the cause. The clock was altered and sometimes stopped altogether. On other occasions the light of day was excluded, and candles kept burning as if it were still night; but none of these stratagems seemed to have the least effect in altering the periods.

It was their general practice to awaken her about an hour before the expected attack, if she did not awake spontaneously, which was for the most part the case. This was done that she might have time to take a little food. They were advised not to awaken her, to see if she would sometime or other oversleep herself. One day she did not awake till within a few minutes of the hour, and her awaking then seemed to be in consequence of the uneasy premonitory symptoms coming on. At the precise time she began her motions as usual, and continued till the ordinary hour in the evening, without taking either food or drink.

In some of her former motions she seemed to be much hurried and agitated, but in the present paroxysm, when left to herself, she went on in the most cool and deliberate manner, like a child playing itself at its ease.

From the time she began the present species of motion, there were always one or more persons beside her. It was suggested to try what effect it would have to leave her alone. This experiment was tried some time before she came to Glasgow. Without

any previous notice, all the attendants slipt out of the room and left her. It was sometime before she seemed to miss them. She was then seen to look about, but continued her motions. After some time finding the room still empty, she stopped for a minute and looked round her. She then went on without seeming to give herself any farther concern. After this she would pass nearly whole days without being spoken to, or the least attention paid to her. She never seemed to be so happy and contented as when entirely left to herself, nor so unhappy as when any person attempted to obstruct her motions.

In some of her former paroxysms, particularly the one before the present, she seemed to notice what was going on about her, was pleased with the presence of her former companions, would have taken their playthings into her own hands, and examined them with care and apparent satisfaction, and yet all the while the motions were going on with undeviating regularity. At present she made no use of her hands, and seemed to pay no attention to any thing, except when she heard some proposal respecting herself.

She was remarkably attached to her father, and seemed to be more happy under his charge than that of any other person. She was also fond of her mother, but as she had a young family to attend to, the father was the chief attendant.

She generally voided her urine before she began her motions in the morning, and after she was stopped at night, but she required likewise to do it through the day. This seemed to give her great distress. After feeling the desire, she began to whine and fret, but still continued the motion. At last when it could be no longer retained, and when she began to feel her clothes getting wet, she was excessively distressed and uneasy, and generally did not recover her composure for the rest of the day. After some time, the attendants, when they perceived those signs of uneasiness coming on, drew her forcibly to the bed side, and held her fast till this operation was accomplished. Although she wished this to be done, she struggled a good deal, and if they attempted to keep her a single moment longer than was necessary, she became quite outrageous.

Her bowels of late had been excessively costive. She generally had no motion except in consequence of an injection. Innumerable attempts were made to remedy this by different kinds of purgatives, but it was found very difficult, if not impossible, to make her take any. Even calomel, concealed in the most secret manner, could hardly escape her detection. It had, however, at times been given to such an extent as to affect her mouth, as well as to make a considerable impression on her bowels.

Her body was greatly emaciated, though not so much as might have been expected, from the violent exercise and the small quantity of food she took. Her skin was harsh and dry, and her extremities generally cold.

Besides the remedies I have mentioned, a variety of others were tried during the course of her illness. An emetic was given at the commencement. She was three times blistered on the head. Her bowels had been violently purged for several weeks. The cold bath had been persisted in for six weeks. A seton was inserted in her neck, and kept discharging for a considerable time. Leeches were applied to the temples. Gestation in an open cart was tried on one or two occasions. It was after an excursion of this kind, that she was seized in the night with the second kind of motion the turning round in bed like a roller. She seemed to experience no sort of relief from any thing that was tried.

She had been brought into Glasgow during the night, in an open gig, and returned home in the same manner. The day following, she was seized with a spontaneous diarrhoea, and soon after that she became more tractable. She took any purgative that was prescribed, and as often as they chose to give it to her. In two weeks the motions became more slow and languid, and the difference of elevation between the right and left leg

was still more remarkable. Her father now attempted to put a stop to the paroxysms before the usual period, and succeeded. She continued sick and distressed all night. Next morning, when the motions should have begun, she expressed a wish to go to bed. For some time she kept her bed pretty constantly, but began to show signs of amendment, and never afterwards had any more of the motions. In the course of a few weeks she recovered her speech completely, and also her former health, strength, and spirits; and has continued perfectly well ever since. If any difference, her parents think her now more affable, active, and intelligent than ever.

During the whole illness, the mind seemed to be affected nearly in the same manner as we find it in common cases of chorea. This was more especially the case towards the latter part of the complaint. After the occurrence of the diarrhoea, she became more sensible, and was much more easily persuaded to do any thing which was judged necessary. As purgatives had been strongly recommended by most of the medical gentlemen who saw her, these were diligently applied, and operated powerfully, and I have no doubt contributed materially to her complete recovery. The disease may perhaps have a tendency to run a definite course, and cease spontaneously. On the other hand, the same medical treatment which seemed void of efficacy at the beginning, may have proved

beneficial at a more advanced stage, and I cannot help thinking that the present case goes a considerable length in proving the expediency of Dr. Hamilton's purgative plan in Chorea, and similar affections.

Since her recovery, innumerable attempts have been made to ascertain if she recollects what passed during her illness, and what ideas she entertained at the time, but she has always shown the utmost reluctance to speak on the subject. She has however on various occasions, especially among her companions, inadvertently mentioned so many circumstances which occurred during her illness, that her friends have no doubt of her remembering distinctly every thing that happened, even when she was at the worst.

For the account of her situation since she left Glasgow, and also for some particulars respecting her former history, which had escaped me, I am indebted to my late pupil, Mr. Andrew Lindsay, now surgeon at Galston. The whole statement, as now drawn up, has been submitted to her parents, and has received their corrections and approbation.

Another case, similar to the one I have related, occurred some years ago, in the parish of Dalry, in Airshire. The subject was a young female. I do not know how long her illness continued, but

she ultimately recovered completely. I have been informed of a third in the neighbourhood of Air, but of her case I have heard no particulars. A very remarkable case, perhaps somewhat similar to the one I have described, occurred at Bargaran, in Renfrewshire, in 1696. The patient's name was Christian Shaw, a girl of eleven years of age: she is described as having had violent fits of leaping, dancing, running, crying, fainting, &c., but the whole narrative is mixed up with so much credulity and superstition, that it is impossible to separate truth from fiction. These strange fits continued from August 1696, till the end of March in the year following, when the patient recovered. An account of the whole was published at Edinburgh, in 1698, entitled, "A True Narrative of the Sufferings of a Young Girl, who was strangely molested by Evil Spirits, and their instruments, in the West, collected from Authentic Testimonies."

The whole being ascribed to witchcraft, the clergy were most active on the occasion. Besides occasional days of humiliation, two solemn fasts were observed throughout the whole bounds of the presbytery, and a number of clergymen and elders were appointed in rotation, to be constantly on the spot. So far the matter was well enough. But such was the superstition of the age, that a memorial was presented to his Majesty's most honorable privy council, and on the 19th of January,

1697, a warrant was issued setting forth “that there were pregnant grounds of suspicion of witchcraft in Renfrewshire, especially from the afflicted and extraordinary condition of Christian Shaw, daughter of John Shaw, of Bargarran.” A commission was therefore granted to Alexander Lord Blantyre, Sir John Maxwell, Sir John Shaw, and five others, together with the sheriff of the county, to inquire into the matter and report. This commission is signed by eleven privy counsellors consisting of some of the first noblemen and gentlemen in the kingdom.

The report of the commissioners having fully confirmed the suspicions respecting the existence of witchcraft, another warrant was issued on the 5th April, 1697, to Lord Hallcraig, Sir John Houstoun, and four others, “to try the persons accused of witchcraft, and to sentence the guilty to be burned or otherwise executed to death, as the commission should incline.”

The commissioners, thus empowered, were not remiss in the discharge of their duty. After twenty hours were spent in the examination of witnesses, and counsel heard on both sides, the counsel for the prosecution “exhorted the jury to beware of condemning the innocent; but at the same time should they acquit the prisoners in opposition to legal evidence, they would be accessory to all the blasphemies, apostacies, murders, tortures, and

seductions, whereof these enemies of heaven and earth should hereafter be guilty." After the jury had spent six hours in deliberation, seven of the miserable wretches, three men and four women, were condemned to the flames, and the sentence faithfully executed at Paisley, on the 10th June, 1697.

Though we cannot confidently boast of the powers* of medicine in this disease, yet we may flatter ourselves that this narrative may not be without its use, by putting the last hand to the *cure* of a malady of the mind, which in past times has led to such tragical incidents; and we may be permitted to congratulate ourselves on our lot being cast in an age of the world, in which, from the progress of science, even the lowest orders are in a great measure delivered from the degrading dominion of a superstition† with which the higher orders, nay,

* Since this article was drawn up, it has been suggested by a friend of the author's that in case of the recurrence of a similar disease in future, some benefit might arise from keeping the patient awake as much as might be consistent with safety. He grounds this proposal on the view he takes of the nature of the disorder as consisting in a superabundance of that principle, whatever it is, by which the voluntary action of muscles is supported, by the exhaustion of which fatigue is induced, and the re-production of which is effected by sleep.

† A similar instance of the correction of popular errors, by the lights of knowledge, may be adduced in the gradual extinction of the belief in ghosts, with which the human mind has so long been disturbed. A very ingenious and interesting tract, on
this

the judges of the land, were infested at no very distant period of our history.

this subject, appeared in the year 1810, in the Edinburgh Medical Journal, by Dr. Alderson, of Hull. This branch of superstition, as well as that adverted to in the text, is there very fairly traced to morbid affections, and affords another proof and example of the beneficial influence of the diffusion of natural knowledge, particularly of that which regards animal nature, on the dignity of the human character, as well as on the happiness of social life, in all ranks of the community.—See more on this subject in the 4th Vol. of these Transactions, p. 104.

