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NEW CASES OF G.P.I.

BY

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Is general paralysis of the insane (G.P.I.) becoming increasingly common to-day? This question has commanded our attention in recent months owing to the increasing number of cases we have seen. For some years now G.P.I. has been a rare disease. At one time it was relatively common, and wards full of these cases could be seen in most mental hospitals. To-day, of course, it is difficult to find cases of G.P.I. in mental hospitals. However, our experience in a busy psychiatric observation ward suggests that the disease is becoming more frequent. This ward is situated in a busy working-class north London district, drawing its patients from London, Middlesex, Essex, and Hertford. It has twelve beds and there are approximately 500 admissions per annum. Until two years ago only one, or perhaps two, cases of G.P.I. were admitted to this ward each year; these were invariably of long standing, had been treated, and were still showing psychiatric disturbance. However, during 1959 nine cases of G.P.I. were admitted to the observation ward. Steel (1960) described 14 cases of G.P.I. admitted to a 70-bed observation ward in the period April, 1957, to September, 1958. Our nine cases in a smaller unit and over a shorter period suggest that the frequency of G.P.I. is still increasing.

Most cases of G.P.I. present as psychiatric problems. In this paper the nine cases are described, particular attention being paid to the psychiatric picture.

Case 1

A man aged 65 was admitted from a general hospital, where he had been disturbed, aggressive, and confused after a laparotomy performed for abdominal pain. He laughed jovially at the slightest provocation, though he looked ill. His speech was rapid, words falling over each other, and punctuated by bursts of laughter. He frequently thumped the bed with his fists. He had florid, garish delusions of a grandiose nature, was grossly hallucinated both visually and aurally, and saw coloured men rushing at him and moving

his bed about. Three conjurers were in the ward trying to shoot him, and he roared with laughter as he described this. He was said to have had disseminated sclerosis over the past seven years which had affected his gait. At laparotomy no abnormality was found, and we believed that his pain was due to a tabetic crisis.

Physical Findings.—Slurred speech; partial Argyll Robertson pupils; left choroidoretinitis; brisk reflexes but diminished ankle-jerks and left extensor plantar response; loss of posterior-column sensation in the legs; positive Romberg's sign. Blood W.R. positive. C.S.F.: W.R. positive, cells 55 (mononuclear), protein 70 mg./100 ml., paretic Lange curve.

Psychiatric Picture.—A hypomanic confusional state with hallucinosis.

Case 2

A man aged 67 was admitted with a confusional state. He was bright, cheerful, euphoric, voluble, and visually hallucinated. There was a well-marked impairment of memory and he was disorientated for time, place, and person. He had a respiratory infection on admission and his hallucinations cleared up when his temperature became normal. He had Argyll Robertson pupils, increased tendon reflexes, and flexor plantar responses. Speech was a little slurred, and there was tremor of the tongue and fingers. Blood W.R. positive. C.S.F.: W.R. positive, cells 30 (mononuclear), protein 50 mg./100 ml., paretic Lange curve.

Psychiatric Picture.—A mild confusional state with memory impairment and disorientation. Hallucinations associated with respiratory infection; garrulous and overtalkative.

Case 3

This patient, a man aged 46, was admitted because of strange and violent behaviour at home, where he was no longer manageable. There was a gradual onset of deterioration in personality. He spent his money foolishly—for example, he bought many boxes of soap powder and half a dozen clocks—became violent-tempered and abusive; and would not tolerate disagreement by anyone. His memory became impaired during the past 18 months, especially for recent events, and latterly he made up fantastic stories. Often he was noisy, abusive, and violent, particularly when obstructed in any way, and threw food on the floor and smashed plates. He was restless and agitated. He had paranoid ideas about his wife, and thought that she had plenty of money which she kept from him. He gave a very poor account of himself and was often at a loss for words. A well-marked memory defect for recent events was apparent, and he tended to confabulate to cover up this deficiency. He was unable to describe or explain anything clearly. Mild disorientation was present. Though generally cheerful and co-operative he could be surly and suspicious at times. His main complaint was of impotence.

Physical Findings.—Slight slurring of speech; Argyll Robertson pupils; tremor of lips and tongue; reflexes normal. Blood and C.S.F., W.R. positive. Paretic Lange curve.

Psychiatric Picture.—A mild confusional state with impairment of memory and a Korsakoff syndrome. Aggressive, overactive, and hypomanic, with a paranoid background.

Case 4

A woman aged 69 was admitted because of confusion, inability to walk at times, and disturbance of memory. She became lost in her own house, was often incontinent, and had difficulty in speaking. She was said to have been suffering from an "anxiety state" for many years. In the past two years she had deteriorated gradually, and had been considered to be suffering from senile dementia. She had poor attention and comprehension. There was a marked impairment of memory, particularly for recent events. She was unable to perform the simplest calculations. She had a fatuous, silly smile and her mood was euphoric. She was quite disinterested in her constant incontinence.

Physical Findings.—Right shoulder Charcot joint; well-marked dysarthria with tremor of tongue and lips; all tendon reflexes absent; flexor plantar responses; limbs hypotonic; marked impairment of proprioceptive sensation; positive Romberg sign. Blood W.R. negative. C.S.F.: W.R. positive. Husband had a positive W.R., and his boisterous, noisy manner was suggestive of G.P.I. He was also partially blind. One son had a positive W.R. and syphilitic disease of the heart.

Psychiatric Picture.—A progressive dementia with confusion, memory loss, and euphoria. Personality deterioration shown by dirty, unkempt appearance and disregard of double incontinence.

Case 5

A man aged 51 was admitted because he refused to go to bed, to take off his clothes, or to go to work. His memory had become defective in the past year and he seemed to have difficulty in grasping a conversation. At times he mumbled to himself. In the past month he had been depressed, had often cried, and sometimes threw himself on the floor in tears. Previously he had been a steady worker. In the past six years he had frequently changed his job, and his financial and social position had deteriorated. He had often borrowed money and not repaid the loans. In the flat where he lived he caused trouble by his abusive language and aggressive behaviour. He recently became sexually immoral and often confabulated.

Physical Findings.—No abnormalities found. Blood and C.S.F., W.R. positive. Wife has a positive W.R.

Psychiatric Picture.—A gradually progressive dementia with memory impairment, and a Korsakoff syndrome with pathological lying. Deterioration in behaviour, morals, and social and financial position.

Case 6

A man aged 44 complained of having had headaches, nausea, loss of energy, and depression for six months. He had paranoid ideas about his workmates. Depressive features included self-blame, the belief that he was a burden to his family, and the delusion that his wife and children would all die. His wife stated that his personality had changed markedly in the previous six months. He had lost over 2 st. (12.7 kg.) in weight. He was muddled and confused, repeated things again and again, and was very irritable. He put brandy in the refrigerator and seemed lost at times. His headaches were extremely severe, and were associated with vomiting; they often occurred during the night and were of a throbbing nature, affected by posture, and relieved by analgesics. He would forget his whereabouts in the ward. He once poured tea continuously into a cup all over the table. Depression was a marked feature. He was more depressed in the morning and he talked about suicide. For the previous six months he had been treated by a doctor for a depressive state.

Physical Findings.—Slurring of speech with slight tremor of the tongue and lips; Argyll Robertson pupils; choroidoretinitis present; no papilloedema; tendon reflexes all exaggerated, with a right extensor plantar response. Blood W.R. positive. C.S.F.: W.R. positive, 35 lymphocytes, protein 75 mg./100 ml., paretic Lange curve, pressure normal. Skull x-ray films normal. Wife and children have negative W.R.

Psychiatric Picture.—A psychotic depression with depressive type of delusions but with memory impairment and confusion.

Case 7

A ticket clerk aged 50 was admitted because of his abnormal behaviour at home and at work. His work record had been excellent until August, 1959, when he complained of loss of memory. Since then he had become more and more difficult to get along with. He started to lose things and then to accuse other people of stealing them. His behaviour became excitable and emotional and recently he

had been crying with little provocation. He lost his appetite, and his sleep became disturbed. He frequently pushed his wife out of bed, and would sit up in the middle of the night waving his arms about and shouting. He became more and more garrulous. He often produced a jumble of words that made no sense. He shouted that the cooker was painted red. Recently he had been stamping about at home banging doors, switching lights on and off, and turning all the taps on full. He appeared to be aurally hallucinated. In the ward he was impulsive, aggressive, and obstinate. He was unable to give a reasonable account of himself and had difficulty in formulating sentences. He often repeated words several times or searched about for a verb. He frequently said "what's a name" or "thing" instead of a noun. There was a well-marked memory impairment, particularly for recent events, and he was slightly confused regarding his whereabouts. He showed marked emotional lability.

Physical Findings.—Dysarthria and nominal aphasia; tremor of tongue; partial Argyll Robertson pupils; generalized increase in tendon reflexes with both ankle and patellar clonus; extensor plantar responses. Blood W.R. positive. C.S.F.: W.R. positive, cells nil, protein 40 mg./100 ml. Lange curve negative.

Psychiatric Picture.—A previously normal personality with a good work record until first psychiatric disturbance at the age of 50. Bizarre behaviour with garrulous, non-sensical speech. Hallucinations and absurd delusions. Overactive and aggressive. Mood swings between depression and elation. Marked deterioration in personality and work record. Well-marked memory impairment and disorientation.

Case 8

A woman aged 45, admitted because of her violent and manic behaviour, was an excellent wife, mother, and housekeeper, with no previous history of psychiatric illness. She first became ill about three months previously. Main features were excitement, overactivity, and delusional ideas. She had been waking at 3 a.m. and getting up to do her housework and going to her neighbours during the day to do their housework as well. She was excessively energetic. She accused her husband of having affairs with the neighbours and she set out to attack one of them with a chopper, which led to her admission to the observation ward. At first she was extremely violent, abusive, and noisy, threatening everyone. Later she was garrulous and cheerful, and exhibited flight of ideas. She had both grandiose and paranoid delusions. Everyone was against her because they were jealous, because she was so rich. She had been left a great fortune and a house in Ireland. She had a mink coat and cape. A dozen men in the neighbourhood were in love with her, and two were fighting a duel over her. She had adopted a baby girl and the neighbours were jealous of that, too. She said that she was pregnant, and that she had an oil painting worth £75,000. She said that she received messages from God and that she was a faith healer.

Physical Findings.—No abnormalities found except for an increase in muscle tone and generalized increase in all tendon reflexes. Plantar responses flexor. Blood and C.S.F., W.R. positive.

Psychiatric Picture.—Acute mania with grandiose delusions, flight of ideas and aggressive behaviour. No memory defect or other evidence of dementia.

Case 9

For six months this patient, a Jamaican woman aged 40, had had paranoid and grandiose delusions. She believed someone was trying to poison her by means of poisonous apples; that the neighbours put things in her bed which made her skin itch; and that they did "other terrible things" to her. She said they were after her money. She wrote a cheque for £21,553 though she had only £15 in her bank account. She said this fortune was given to her by the Queen and she had written to the Queen about it. She

had not worked for the previous six months because of her supposedly sound financial position. She had been noisy at times, putting her bed out of the room, and soaking all the bed-linen in her possession with water. She said that everyone in the house, in the street, and in London, were trying to poison her to obtain her vast fortune. She was aurally hallucinated. She could hear the voices of the spirits which told her what to do. There was no memory defect or disorientation.

Physical Findings.—No abnormality found except a slight suggestion of slurring of speech. Blood and C.S.F.:W.R. positive.

Psychiatric Picture.—A grandiose paranoid state with aural hallucinations.

Discussion

Of the nine cases here presented only one (Case 5) was a known case of G.P.I. The others had not been previously so diagnosed. It is of interest to note the diagnosis under which these patients were admitted to hospital. Three were diagnosed as toxic confusional states, one due to senility. Three others were considered to be suffering from manic states. One was thought to be a schizophrenic, another to be suffering from a psychotic depression, and another from hysterical amnesia. The commonest psychiatric picture in our nine cases was of an excited, irritable, restless state with confusion. The classical grandiose delusions were not at all prominent. Similarly, of Steel's (1960) 14 cases, six showed a manic, excited state and seven had symptoms of confusion. The features of confusion are (1) memory defect, particularly for recent events, and (2) disorientation for time, place, and person. These two symptoms are pathognomonic of mental disorder due to organic brain disease. They are not found in other psychoses. Other recurring symptoms in our cases were confabulation, and symptoms of deterioration in personality and habits. The most frequent physical signs were pupillary abnormalities, slurring of speech, and tremor of the tongue and lips. Because of an incorrect diagnosis one of our patients had been operated upon for bladder incontinence. The same thing happened to one of Steel's cases.

From our experience in these cases we are impressed with the importance of excluding G.P.I. in every case of early organic dementia or confusional state; and every manic state with impairment of memory should be regarded with suspicion. We now feel that the Wassermann reaction should be performed in all psychoses. We have been impressed with the importance of repeating the W.R. when a negative result does not support the clinical picture. In three of our cases the W.R. was negative the first time and positive on repeating the test.

It is now 15 years since the 1939–45 war ended, about the correct time interval for the appearance of G.P.I. from syphilis contracted during the war. During this period many patients were treated with penicillin for infections other than syphilis, and this may well have hidden the primary and secondary manifestations of the disease. This treatment, of course, would have been inadequate for the complete treatment of syphilis, and would not have prevented the occurrence of G.P.I. to-day. Though the disease is now almost forgotten, only 20 years ago G.P.I. was far from rare. Our recent experience suggests that G.P.I. must once again be considered in the differential diagnosis of psychotic states.

Summary

Nine cases of G.P.I. are described, all admitted in 1959 to an observation ward which had a total of 447 admissions during that year, an incidence of 2%.

It is suggested that the incidence of G.P.I. is increasing owing to syphilis contracted during the 1939–45 war.

The wide use of penicillin during and after the war may have hidden the early stages of syphilis, but may not have eradicated the disease.

The psychiatric picture of G.P.I. is discussed, the commonest features in our cases being memory impairment, confusion, disorientation, personality deterioration, manic excitement, irritability, and delusions.

The commonest physical findings were pupillary abnormalities, slurring of speech, and tremor of the tongue.

The importance of excluding G.P.I. in all psychoses with evidence of early dementia is emphasized.

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A COMPARISON BETWEEN EPIDURAL ANAESTHESIA AND BED REST IN SCIATICA

BY

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Epidural anaesthesia is by no means a new method in the treatment of sciatica. Cathelin (1901) used it as a new route for spinal injection and described its application to man. Caussade and Queste (1909) reviewed several cases in which "sciatica" had been relieved by spinal injection of "stovaine" (amylolcaine hydrochloride); but their criteria for diagnosis of the patients and their description of the technique were rather vague. Evans (1930) investigated the results in 40 patients with sciatica, and claimed that 22 were cured; up to 145 ml. of fluid was injected, the average being 98 ml. On different occasions he injected normal saline, 1% procaine, 2% procaine, and 1% procaine followed by normal saline; 14 of the patients had neurological signs, recorded as impaired or absent ankle-jerks. In 39 of the 40 patients straight-leg raising was painful.

Kelman (1944) recorded the results of 486 injections into 116 unselected patients with "sciatica." Eight of them were "cured," 41 showed marked improvement, 45 had moderate improvement, 17 had slight improvement, and 5 showed no change. He pointed out that the relief of pain outlasted that expected from the anaesthesia, and suggested that the treatment had some effect on the primary cause of pain. In the light of more recent knowledge regarding disk prolapse and sciatica, it is likely that there were other causes of pain in the leg in these two series, making an interpretation of their results rather difficult. Cyriax (1957) laid down comprehensive indications regarding selection of patients for this form of treatment, and

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