ing. Her weakness gradually increased so that she could only walk with difficulty, and she used to fall down in the street without any warning, and when down could not get up until assisted. The symptoms vary a little in degree every few days, but on the whole have gradually got worse and have never at any time completely disappeared. About eighteen months ago, while singing, her tongue became paralysed and she could not articulate distinctly, and about twelve months ago she had difficulty in swallowing, and liquids came down her nose. Five months ago suffocative attacks supervened. There was no history of diphtheria. On examining the eyes it was found that there was slight ptosis on both sides, and that the movements of the eyeballs were sluggish, and restricted in all directions, especially upwards. The right eye could not be turned upwards at all, and forced movement in any direction was attended with nystagmus; diplopia was present at times. The field of vision when the lids were raised was normal. The pupils were equal, of normal size, and responded to light and accommodation perfectly. The fundus oculi was normal on each side. She could not close her eyes tightly, and fibrillary tremor of the orbicularis muscle occurred when she tried to do so. She complained of food collecting between the gums and teeth, and that her tongue was weak. Her speech was a little indistinct, more especially after talking for a few moments. She complained also of difficulty in swallowing, but no paralysis of the soft palate could be discovered, and the palatal reflex was present. Mastication was impaired from loss of muscular power. The arms could not be lifted from the shoulders, the deltoids were large, and all the other muscles appeared normally developed, there were no sensory changes, no exaggeration of reflexes, and no electrical changes. The spinal muscles were very weak, the patient being unable to sit up without assistance, and when supported on her feet marked lordosis was present. She raised herself from the sitting position by placing her hands on the chair, and did so with great difficulty. When lying down she could not get up at all without assistance. Her legs were also very weak, for she could not lift them from the bed. Her gait was slightly waddling, and she would have fallen without support. The knee-jerk was a little increased, but there was no ankle clonus; the plantar reflexes were usually absent. There were no sensory changes, but the hands and feet were cold and blue. The patient was admitted into the Queen's Hospital for further observation. It was found that she could not lie down in bed, dreading an attack of suffocation, and she had to be propped up in bed constantly. An attempt to examine the throat brought on inspiratory stridor and cyanosis to such an extent that the patient seemed about to be suffocated. She stated that she had had several of these attacks, and that she was afraid she should die in one of them. She asked for her meat to be minced, saying that she had no power to masticate it, though her teeth were good. The patient has been under observation three months and remains in the same condition. She has had no febrile attacks, no convulsions, and no hysterical symptoms.

CASE II is that of a young lady brought to me by Dr. Smith, of Redditch. She is 18 years of age and very tall. Her illness is attributed to exhaustion. She has been ailing three years, her illness commencing gradually and slowly increasing since. She is extremely weak, being unable to walk more than a hundred yards without becoming exhausted. The arms are also very weak and the grasp feeble. She cannot hold her arms out or place them on her head. There is slight ptosis, squinting, and diplopia at times. The movements of the eyeballs are attended with nystagmus, and are much restricted in all directions. The left eye cannot be moved outwards and the right cannot be moved downwards. The knee reflexes are a little increased but there is no ankle clonus. She complains of difficulty in swallowing and in mastication. After mastication the jaw drops, and she has to support it until power is recovered. She complains also of difficulty in articulation. She is slightly choreic. She has had no suffocative attacks and no fits, nor has there been any hysterical symptom.

This case almost exactly resembles Case I now in the Queen's Hospital. Both these cases have been supposed to be cases of hysteria, but the gradual onset and slow progress without any sudden changes, the implication of muscles supplied by the third motor portion of fifth, sixth, facial, hypoglossal and spinal accessory nerves, the nuclei of which form a continuous series in the iter and fourth ventricle, tends to prove that the disease is not hysteria. At the same time the disease is probably functional, and of the nature of an exhaustion paralysis, and there is no reason why each patient should not recover.

GENERAL PARALYSIS OCCURRING ABOUT THE PERIOD OF PUBERTY.¹

By J. WIGLESWORTH, M.D. LOND., M.R.C.P.,
Medical Superintendent Rainhill Asylum, and Lecturer on Mental Diseases, University College, Liverpool.

GENERAL paralysis is regarded as in the main a disease of the prime of life, and though, as is well known, cases are frequently met with both before and after this epoch, the association of the disease with the period of puberty has hitherto been hardly recognised. Scattered cases of juvenile general paralysis have indeed been recorded by Clouston, Turnbull, and others; and in the *Neuroses of Development*, recently published by Clouston, two fresh cases are described, in which the connection of the disease with puberty is fully recognised, under the title of "Developmental General Paralysis."

¹ Abstract of a Paper read at a Meeting of the Medico-Psychological Association, March, 1893.

Two cases recently under my care in Rainhill Asylum confirm and establish this connection. Both occurred in girls, the disease in the one case commencing at the age of 12, and in the other at the age of 14, and proving fatal at 16 and 18 years of age respectively. Both children had previously been intelligent, and in both cases the disease was said to have been started by a fall, though whether this was the cause of the disease, or merely an early symptom of it, could not be ascertained. The mental symptoms in both cases were those of slowly progressive dementia without grandiose ideas, a gradual, almost imperceptible, failure of mental power having been noticed from the first; and soon following the mental failure came slowly progressive paresis of the limbs, until at length the patients were absolutely paralysed and bedridden with strongly developed contractures. Epileptiform convulsions were noted in one of the cases. The *post-mortem* appearances in each case were characteristic; there being great thickening and opacity of arachnoid with adhesion of pia mater to cortex, and in one case decortication; enormous wasting of the convolutions, and great atrophy of the cortex; whilst in one case there was an old, thick, organised, subdural membrane.

Analysis of these two cases, and of six other published cases—eight in all—shows that the average age at which the disease commenced was 14 years. There was a tendency in the disease to be more prolonged than usual, the average duration being 4½ years. Five of the cases were girls and only three boys, which seems to indicate that the great preponderance of male cases in adult general paralysis tends to disappear in these juvenile cases. The mental state showed an immense preponderance of the demented type of general paralysis, grandiose ideas being only present in one case. The signs of puberty either did not appear at all, or were arrested and tended to disappear, menstruation in the females being absent; and an arrest of bodily development was also noted in all cases. The two most prominent factors in the production of the disease appeared to be heredity and congenital syphilis, traumatism being also probably an additional cause in some cases.

TONSILLOTOMY, WITH AN ANALYSIS OF 230 CASES.

By G. HUNTER MACKENZIE, M.D.,

Surgeon for Diseases of the Throat and Nose, to the Eye, Ear, and Throat Infirmary, Edinburgh.

THE text of the present communication on this simple subject is the expression of opinion by a recent writer that excision of the tonsils is a bloody and barbarous operation, followed in many instances by grave depression of health. Tonsillectomy differs from many other operations, inasmuch as it is frequently performed by general practitioners and is not restricted to the hands of a few surgeons or specialists. Its discussion ought consequently to be of interest to the mass of the readers of the *BRITISH MEDICAL JOURNAL*, more so, indeed, than many of the major operations.

To assist at arriving at impartial conclusions on these and other points, the following cases, which have passed through my hands during the last few years, have been specially noted. I have been obliged to omit many other cases on account of the difficulty in following them up and ascertaining the effects of the operation.

Age and Sex.—The following were the ages and sex of those operated on:

	M.	F.	Total.
Under 2 years ...	3	2	5
From 2 to 5 years ...	15	9	24
" 6 to 10 " ...	33	31	64
" 11 to 15 " ...	18	24	42
" 16 to 20 " ...	15	24	39
" 21 to 30 " ...	23	14	37
" 31 to 50 " ...	8	8	16
Over 50 years ...	2	1	3
	117	113	230

From this table it will be seen that the greatest number of patients were from 6 to 10 years of age; that the males were in excess of the females, unless at the period of puberty, when the proportion of the sexes was reversed, and that the