ANNALES
UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA
LUBLIN – POLONIA
VOL. LIX, N 1, 43 SECTIO D 2004

Department of Neurology, Skubiszewski Medical University of Lublin

HALINA BARTOSIK-PSUJEK, MAREK PSUJEK, ZBIGNIEW STELMASIAK

Rare first symptoms of multiple sclerosis

Multiple sclerosis (MS) is a chronic recurrent inflammatory disorder of the central nervous system (CNS). The disease results in injury to the myelin sheaths, the oligodendrocytes, and, to a lesser extent, the axons and nerve cells themselves. The prototype patient is a young woman of childbearing age, although men make up 25% to 30% of all cases. Typically, patients begin by experiencing episodic neurologic abnormalities – acute disease attacks that can improve spontaneously (relapsing-remitting MS). In most cases, this pattern yields to a steady progressive phase, with or without superimposed attacks and without meaningful recovery. In 10% to 15% of cases, the slowly progressive phase occurs from the start, with a small minority of these experiencing an occasional relapse that occurs some time later (1, 2, 4, 5, 6). The symptoms of MS vary, depending on which parts of the brain or spinal cord are damaged by inflammation and the destruction of myelin. There is considerable heterogeneity in the presentation of multiple sclerosis, and none of the physical symptoms is particularly specific for the disease. The most frequent first symptoms of multiple sclerosis are the following:

- Sensory impairment – sudden weakness, numbness or sensory symptoms (paraesthesia) in one or more limbs. This is the presenting feature in about 30–60% of cases. As a sensory symptom is regarded Lhermitte's sign. It resembles a sensation like an electric shock in the back and limbs on flexing the neck, which is highly suggestive of MS.
- Optic neuritis – characterised by impaired or loss visual acuity, scotoma and hyperaemia or oedema of the optic disc.This symptom is presenting as a first symptom in 20–30% of cases.
- Motor symptoms – which may produce spastic weakness, seen most markedly in the legs and characterised by heaviness, stiffness, leg dragging and a tendency to drop things. Paraparesis or hemiparesis may occur as well and motor symptoms are initiating symptoms in about 20–50% of patients.

Less common early symptoms include: Diplopia and/or vertigo due to brain stem involvement. Urinary and sexual difficulties. Fatigue.

Weinshenker and colleagues have demonstrated that sensory impairment was the most common symptom at initial presentation, followed by optic neuritis. Stratifying patients by age showed that younger subjects present more often with optic neuritis while older patients present most frequently with motor deficits (5, 6).

We present three female patients with multiple sclerosis. The onset of the disease was manifested in these cases with non-typical and rare symptoms:

PATIENT D.K. – AGED 24, A FEMALE

At the age of 19, after waking up, she noticed that she had diplopia (a double vision), especially when looking to her right. It was not accompanied by any deterioration of her visual acuity or any other ailments. *Lesio nervus abduceus* on the right side was found during a neurological examination.

Neurological, ophthamological and laryngologic examinations did not find any deviations from the normal condition. ACT of the head was conducted and there was no trace of pathology found within tested structures. An examination using the evoked potentials method showed traits of *multifocalis* lesions CUN. A magnetic resonance (MRI) of the head and cervical spine was also conducted and it showed demyelination of the white matter and the brain stem around the fourth ventricle. The symptoms manifested themselves for about 5 days and then disappeared completely. About 11 months after the first occurrence of the disease, left-side neuritis retrobulbaris occurred. The diagnosis of multiple sclerosis was definite according to Poser's criteria (3). After 5 months, *neuritis retrobulbaris* occurred again on the left side, and after 6 months it was bilateral. For the next 3 years the patient felt well, however, after that period, bilateral *neuritis retrobulbaris* occurred again, and after next 5 months there was a next relapse – hemiparesis of the left limbs and cerebellum signs. Thus a lumbar punction was performed. The routine analyses (cell count, glucose and total protein levels measurement) of the cerebrospinal fluid showed no abnormalities, but the oligoclonal bands of IgG were present. These results confirm the diagnosis of MS. The next relapse was after one year of remission. Triparesis appeared (hemiparesis of the left side, paraparesis of the right limb), dysesthesia (loss of sensibility) and paresthesia in the lower limbs and the trunk.

PATIENT T.A. – AGED 30, A FEMALE

At the age of 26 she began to feel a strong pain in the thoracic and lumbar vertebra. The pain developed quickly, but it had not been preceded by any injury, infection or physical effort. It did not radiate towards the lower limbs. The neurological examination found the presence of symmetrically increased tendon reflexes both in the upper and lower limbs. Lasequa's signs were bilaterally absent. The thoracic and lumbar vertebrae were X-rayed but no pathological symptoms were found. The patient was given nonsteroid and anti-inflammatory drugs. The events recovered after about 2 weeks. After 3 months the pain reoccurred and it was located in the same area. By a neurological examination were found increased tendon reflexes, especially in the lower limbs, and bilateral presence of the Babiński's sign. An MRI examination of the lower parts of the thoracic and lumbo-sacral vertebra was performed, but no trace of pathology was found. A lumbar puncture was carried out. In the cerebrospinal fluid were found: cell count – 9/mm^3, total protein level – 34 mg, glucose level – 56 mg%. The oligoclonal bands of IgG were present. The primary diagnosis of multiple sclerosis was finally confirmed by an MRI examination of the head with numerous focuses of demyelinations in the brain. The next attack of the disease occurred after a 2-year period of remission. Paraparesis occurred, accompanied by dysuria and the cerebellar syndrome.

PATIENT M.T. – AGED 48, A FEMALE

Within a few days she completely lost her sense of taste and smell. There were no other ailments or symptoms. The neurological and laryngologic examinations did not show any deviations. An MRI examination of the head was performed, which revealed numerous hyperintensive focuses in T2 and FLAIR images, located in the fourth ventricle in both cerebral hemispheres. In addition, X-ray images of the cervical vertebra showed some degenerative changes and also some signs of discopathy of C5 – C6. The results of basic biochemical blood tests were normal, no signs of increased blood pressure or heart disease were found. Over a period of one-year observation, her neurological condition deteriorated gradually and systematically. Moreover, additional disorders appeared – some problems of balance, nystagmus and celebellar ataxis. Then a weakness of the right limbs and the presence of the Babiński's sign were discovered bilaterally. Primary progressive SM according to Poser's criteria was diagnosed.

REFERENCES

1. Ebers G. C. et al: Natural history studies and applications to clinical trials . In: Paty D.W. and Ebers G.C. eds. Multiple Sclerosis. F.A. Davis Company Philadelphia, 192, 1997.
2. Lublin F. D. et al.: Defining the clinical course of multiple sclerosis. Neurology, 46, 907, 1996.
3. Poser C. M. et al.: New diagnostic criteria for multiple sclerosis: guidelines for research protocols. Ann. Neurol., 13, 227, 1983.
4. Weinshenker B. G. et al.: The natural history of multiple sclerosis: a geographically based study: I. Clinical course and disability. Brain, 112, 133, 1989.
5. Weinshenker B.G. et al.: The natural history of multiple sclerosis: a geographically based study: II. Predictive value of the early clinical course. Brain, 112, 146, 1989.
6. Weinshenker B. G.: The natural history of multiple sclerosis. Neurol. Clin., 1, 119, 1995.

SUMMARY

The most frequent first symptoms of multiple sclerosis are the following: sensory symptoms, optic neuritis, motor and cerebellar syndromes. Three female patients have been diagnosed with multiple sclerosis on the basis of Poser's criteria. The onset of the disease was manifested in these cases with non-typical and rare symptoms. Patient 1, a woman, aged 24. The first symptom of the disease was an isolated lesion of nerve VI on the right side. Patient 2, a women, aged 30. The first symptom of the disease was acute pain localised within the area of the lumbar-sacral spine. Patient 3, a woman, aged 43. The first symptom of the disease was loss of taste and smell.

Rzadko spotykane pierwsze objawy stwardnienia rozsianego

Najczęstsze początkowe objawy stwardnienia rozsianego to zaburzenia czucia, pozagałkowe zapalenie nerwu wzrokowego, zaburzenia ruchowe, móżdżkowe i podwójne widzenie. Przedstawiono trzy chore, u których rozpoznano klinicznie pewne stwardnienie rozsiane w oparciu o kryteria Posera. Początek choroby u tych chorych zamanifestował się nietypowymi, rzadko występującymi objawami. Chora 1 – kobieta lat 24. Pierwszym objawem choroby było izolowane uszkodzenie nerwu VI po stronie prawej. Chora 2 – kobieta lat 30. Pierwszym objawem choroby był silny ból zlokalizowany w okolicy kręgosłupa lędźwiowo-krzyżowego. Chora 3 – kobieta lat 43. Pierwszym objawem była całkowita utrata smaku i powonienia.