controlls. 6 patients with MS had serum cobalamin level between 100 pg/ml and 120 pg/ml and one of them had serum B12 level of 13.5 pg/ml (normal range: 160 to 970), after 6 months of starting treatment with parentral B12, 2 of the 6 patients, which had mild deficiency, improved significantly in weakness and spasticity but there is no change in new paraclinic tests and neuroimaging, but the patient with serum B12:13.5 which probabely misdiagnosed as MS, had no symptom except mild fatigue and in physical exam there was only mild gait disorder also MRI finding showed noticible reduction in plaque volume.
Conclusion: Because heterogenoue manifestation of MS, incorrect diagnosis of MS and misdiagnosis of overlapping disease in MS patients is common. Cobalamin deficiency is an important differential diagnosis of MS and it's prevalance in MS patients is higher than normal population. Considering of B12 deficiency is important in MS patients.

PO10-TU-74
Simplified expanded disability status scale (EDSS) table and multiple sclerosis

S.L. Laptikultham, P.D. Dusitanond. *Neurology, Medicine, Rajavithi Hospital, Bangkok, Thailand*

Background: The EDSS is used as the standard measurement of clinical disability in multiple sclerosis (MS) patients. It is a rating system which incorporated the Functional systems (FS) within it. The EDSS is used in clinical trials to follow the progression of MS disability and evaluate treatment results. Although it is clinically relevant, familiar and has useful sensitivity on ambulatory aspect, it has its own disadvantages including it is a non-linear scale, has inter-rater variability, and is complex for unfamiliar users.
Method: We developed an EDSS table and FS table from the Kurtzke EDSS. The tables are simplified and user-friendly. We divided the scale into 5 categories, ambulatory, wheel chair, in bed, communicable and swallowing, and death. These categories were subdivided depends on the mobility or severity of neurological deficits according to the FS.
Conclusion: Simplified EDSS table could be used as an effective tool in evaluation and follow-up MS patients in our neurological clinic which computer-based programme is still unavailable. However, this tool needs to be verified first with the patients and users.

PO10-TU-75
Post-vaccination demyelinating disorders of the nervous system

A. Shoamanesh, A. Traboulsee. *Department of Medicine, Division of Neurology, University of British Columbia, Vancouver, Canada*

Purpose: To review a case of post-influenza vaccination Acute Disseminated Encephalomyelitis (ADEM), as well as the literature on the biological plausibility and reports of Post-Vaccination Demyelinating Disorders of the Nervous System (PVDDNS).
Method: Case presentation and literature review of PVDDNS.
Results: A 75 year old woman developed quadriplegia and respiratory depression within 3 to 5 weeks of immunization for influenza. CSF and MRI findings were consistent with a diagnosis of ADEM. The patient subsequently expired, despite treatment with methylprednisolone and plasma exchange therapy. Between 1991 and 2001, 128 717 adverse events were reported to the Vaccine Adverse Event Reporting System, from the 1.9 billion net doses of vaccine distributed within the United States (US). Approximately 1% of these were PVDDNS. There are many case reports and series of PVDDNS within literature, with the association between the US' swine-flu vaccination campaign of 1976 and Guillain–Barré Syndrome being the best established. Increasing concerns about an association between the hepatitis B vaccine and multiple sclerosis even led the French Ministry of Health to temporarily suspend their school-based hepatitis B vaccination program in 1998, however this concern was later laid to rest. The incidence of post-vaccination ADEM varies greatly within the literature depending on the vaccine studied. A post marketing survey performed at the Japanese Kitasato Institute found the incidence of post-influenza vaccination ADEM to be approximately 1 in 10 million.
Conclusion: Although a rare occurrence, the clear indication that certain vaccines can trigger serious autoimmune diseases should be recognized. For example, the influenza virus has been shown to contain 14 antigens that display cross-reactivity with myelin basic protein and current evidence supports the role of molecular mimicry as the most plausible mechanism for all PVDDNS.

PO10-TU-76
Unusual presentation of devic neuromyelitis optica

M.A. Rafai[1], F.Z. Boulaajaj[1], I. Gam[2], I. Slassi[1]. *[1]Service de Neurologie, Explorations Fonctionnelle, Casablanca, Morocco; [2]Service de Neurologie, Hospital Hassan II, Agadir, Morocco*

Aim: Devic Neuromyelitis Optica is rare disease characterised by contemporary or followed optic neuritis and spinal cord involvement, ephaptic crises is exceptional and less documented as neurological manifestation, we report new case to discuss clinical an etiopathogenic aspects.
Case: A 36 years old women admitted in neurological unit (2007) for assesement of four limbs paroxystic dystonic and painfull episodes evolving since 3 months. Medical history revealed retrobulbar optic neuritis event in 2006. Neurological exam objective tetrapyramidal syndrome with ataxia. Ictal and inter-Ictal Electroencephalography were normal. Spine MRI objective large increased signal C2 to C6 level. CSF studies, biological and immunological tests were normal. Corticosteroid pulse associated antiepileptic drugs was administred with good outcome and regression of dystonic crises.
Conclusion: Ephaptic crises is rare symptom of Devic's syndrome but common in demyelinating central nervous system affection. Their origin is spinal or under cortex brain structures. Treatment is based on corticosteroid and antiepileptic drugs.

PO10-TU-77
Is there a correlation between evoked potentials and clinical findings in multiple sclerosis?

S. Demirkaya[1], M. Terzi[2], G. Genç[1], S. Bek[1], Z. Odabaşı[1]. *[1]Neurology, Gulhane, Medical Faculty, Ankara, Turkey; [2]Neurology, 19 Mayıs University, Medical Faculty, Samsun, Turkey*

Purpose: Evoked potentials (EPs) have been widely used in Multiple Sclerosis (MS) patients to demonstrate the involvement of sensory pathways. Prolonged latencies and changes in amplitude in these evoked potentials are thought to reflect sensory loss.
Method: In this study, the abnormalities of visual evoked potential (VEP), brainstem auditory evoked potential (BAEP) and somatosensory evoked potential (SEP) are evaluated retrospectively in 397 patients having the diagnosis of definite MS. Also, this study is performed to determine whether there is a correlation between clinical–demographic findings and evoked potentials in MS.
Results: 210 female and 187 male patients were included in to the study. VEP study was performed in 309 patients, BAEP in 269, tibial SEP in 312 and median SEP in 315 patients. Most of the patients having unilateral and bilateral median SEP, tibial SEP and BAEP abnormalities were male gender ($p < 0.05$). Patients with an initial polysymptomatic event had more evoked abnormalities than patients with an initial monosymptomatic event ($p < 0.05$). The patients having unilateral and bilateral evoked abnormalities showed higher EDSS scores. The number of T2 lesions was higher in patients with unilateral or bilateral evoked abnormalities than in patients with normal evoked potentials. The association between evoked potentials and T2 lesions was found significant statistically ($p < 0.05$). Patients with cervical involvement had more median and tibial SEP abnormalities than patients with normal cervical MRI.