The National Hospital Seizure Severity Scale (NHS3) is a new, easily applicable, physician-administered, seizure severity scale based on the Chalfont Seizure Severity Scale (*J Neurol Neurosurg Psychiatry* 1991;54:873–6). It contains seven factors reported by patients in open interviews as being relevant to seizure severity. We validated the scaling of the NHS3 by two methods. First, 70 patients were asked to rank five prototypic seizures, from a written description, in terms of seizure severity (a typical absence, a brief complex partial seizure (CPS), an atonic seizure with a resultant scalp laceration, an embarrassing CPS, and a generalized tonic-clonic convulsion with prolonged recovery). The rankings were compared with that predicted by the NHS3. Concordance was excellent (weighted $\kappa = 0.8$). Second, 42 patients judged the relative severity of the prototypic seizures on a visual analogue scale (VAS), and mean VAS severity score was compared with the NHS3 predicted score. Again excellent agreement was obtained. Our findings suggest that NHS3 has both content and construct validity.

Methodologic Problems with Assessment of Seizure Severity. M.F. O'Donoghue, J.S. Duncan, and J.W.A.S. Sander (The Epilepsy Research Group, Institute of Neurology, London, England)—8034.

Several recent trials of new antiepileptic drugs (AEDs) have included seizure severity (SS) as an outcome measure. During development of a new SS scale based on the Chalfont Seizure Severity Scale (*J Neurol Neurosurg Psychiatry* 1991;54:873–6), we encountered several methodologic difficulties. In a comparison of the Liverpool and Chalfont scales in the context of a new AED trial, we realized that a significant proportion of epilepsy patients cannot reliably complete self-report SS scales owing to cognitive impairment. In an attempt to produce a scale with individualized weightings for each severity factor, we discovered that most patients find this counterintuitive and difficult. We also noted that subjectively rated items (e.g., my seizures are: mild, moderate, severe) correlate poorly with objective measures of severity (e.g., reported injuries or duration of recovery). We recommend that as an assessment of drug efficacy the SS scale be restricted to a physician-administered measure of objective aspects of SS such as presence of seizure warning, falls, injuries, urinary incontinence, convulsions, automatisms, and duration of recovery.

Validation of Seizure Severity Scale: An Exploratory Study. ‖¶J.L. Ribeiro, ‡‖D. Mendonça, ¶I. Gomes, ¶L. Gonçalves, †J. Lopes Lima, and *§A. Martins da Silva (*Serviço de Neurofisiologia and †Serviço de Neurologia, Hospital de Santo António; ‡Laboratório de Biometria and §Unidade de Fisiologia Humana, Instituto de Ciências Biomédicas Abel Salazar; ‖Unidade de Neurofisiologia e Psicofisiologia do IBMC, Universidade do Porto; and ¶Faculdade de Psicologia e Ciências de Educação da Universidade do Porto, Porto, Portugal)—8035.

The Seizure Severity Scale (SSS) (Baker et al., 1991) is a patient-based scale on which patients classify their seizures according to their subjective experience. The SSS was designed as an outcome measure in evaluation of treatment of intractable epilepsy. We wished to adapt the SSS to the Portuguese population to explore the relation (a) between epilepsy characteristics (age of onset, duration, frequency, type) and SSS item response; (b) between epilepsy characteristics and total outcome measure of SSS; (c) between treatment and outcome measure of SSS; and (d) between personal characteristics (sex, age, education, professional status) and outcome measure of SSS; and (e) to explore SSS as a descriptive tool or as a quality-of-life tool. This research was started early in 1993, with patients followed at the epileptic outpatient clinic of Hospital Geral de Santo António at Porto. The study was based on analysis of data collected from a sample of 50 patients, men and women aged 15–65 years, who had completed basic education, level and who had seizures of various severity levels and types or were seizure-free.

Diagnosing Low-Grade Astrocytomas in Epileptic Patients. Per Schmidt Sørensen, Jesper Krusell, Allan Mortensen, and Kurt Virring Sørensen (Department of Neurology, Central Hospital, Viborg, Denmark)—8036.

We conducted a retrospective study among patients with epilepsy with the dual purpose of detecting structural CNS abnormalities and comparing the efficacy of two different radiologic techniques; computed tomography (CT) and magnetic resonance imaging (MRI). In a 3-year period, 163 patients were included in the study. In 11 of these (3 women and 8 men), we diagnosed and histologically verified grade I or II astrocytoma. These patients were the subject of a separate study designed to describe the natural history of low-grade astrocytomas in epileptic persons.

Mean age of these patients at time of first seizure was 31.3 ± 8.6 years (range 16.9–51.1 years), with delay ranging from 1 month to 11 years for the final diagnosis of a CNS neoplasm. Eight patients had partial seizures, 6 with simple or complex symptoms and 2 with seizures secondarily generalized. In 3 patients, the seizures were instantly generalized. Nine received medical treatment, 6 of these as monotherapy. Only 2 patients, however, had an acceptable seizure frequency of two or fewer seizures a year. The remaining 7 patients had seizure frequency ranging from eight a year to several a day. With MRI, we were able to diagnose 7 patients, suggesting that MRI is more efficient than CT in this particular tumor type. Benign astrocytomas have a recognizable pattern in epileptic persons. With prompt referral to MRI of relevant patients we established correct diagnosis early in the disease, thereby influencing prognosis favorably.

Epilepsy in Patients with Brain Tumor. Saleh Al Deeb, Basim Yaqub, Nabil Biary, Waleed Khoja, Osama Koreich, and Khalaf Al Moutaery (Department of Neurosciences, Riyadh Military Hospital, Riyadh, Saudi Arabia)—8037.

Three hundred fifty patients with brain tumor were reviewed at the Riyadh Armed Forces Hospital in the last 6 years: 33% had epilepsy and 9% had epilepsy as a first symptom. Type of epilepsy was simple partial in 21%, complex partial in 10%, and secondarily generalized in 69%; 33% required more than one antiepileptic drug. Phenytoin was used in 63% of patients, with 28% failure; carbamazepine was used in 21%, with 57% failure. We evaluated the relation between tumor, type, grade, and location and epilepsy.

Bitemporal Epilepsy: Clinical, EEG, and Magnetic Resonance Imaging Findings. Felipe Quesney, Antonio Gambardella, André Olivier, François Dubeau, and Frederick Andermann (Montreal Neurological Institute and Hospital, McGill University, Montreal, Canada)—8038.

Clinical, EEG, or magnetic resonance imaging (MRI) predictors of bilateral independent temporal lobe seizure onsets were studied in patients with temporal lobe epilepsy (TLE) investigated with chronically implanted depth electrodes in amygdaloid and hippocampal structures bilaterally. Among 70 patients with TLE who underwent depth EEG investigation, we selected 11 patients (mean age 31.9 years, range 21–48) with bilateral independent temporal lobe seizure onsets without side predominance. We reviewed clinical, scalp EEG, and neuroradiologic data for each patient.

Eight of 11 patients had a previous history of encephalitis or severe head trauma. No history of febrile convulsions was documented. On serial scalp EEGs, bitemporal independent interictal spiking was documented in all patients. Ictal onsets using