Who coined the term “status gelasticus”? We did

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In a recent review article on gelastic seizures and hypothalamic hamartoma, Tellez-Zenteno and colleagues used the term, “status gelasticus” mostly correctly but referenced completely incorrectly the origins of the definition of this rare but becoming increasingly known phenomenon. This mistake followed upon an unusual oversight of quoting another author who had simply used the term and most certainly did not make any attempts to define it. We had initially published a case report of a 30-month-old boy who underwent successful emergent transcallosal resection of his hypothalamic hamartoma for status gelasticus which lasted six weeks! In this report, we made clear mention that we labeled his “history of near-continuous gelastic seizures” as status gelasticus. Further discussion within this paper stated that although he was not strictly in status epilepticus (as he did regain full awareness between his seizures); his near-continuous gelastic seizure activity fully impaired the patient and his family. An update on this patient is that he had >90% seizure reduction (only a few gelastic seizures every two weeks) for 18 months after the surgery. He then underwent a second surgery: endoscopic resection of residual hypothalamic hamartoma and has now been seizure free for more than two years.

What was even more surprising about the mistake by Tellez-Zenteno and colleagues is that they went on to reference the abovementioned paper as stating that our report occurred subsequent to that by the other author. This was probably a simple mistake although an enquiry on PubMed clearly shows the chronological order of the two papers; not to mention the fact that they were both published in the same journal with our report several issues prior to the other. We have also clarified this previously in a publication entitled, “Coining of a new term, “status gelasticus”” where the term was finalized as referring to a prolonged cluster of gelastic seizures (ie, for more than 20–30 minutes, a duration similar to that for status epilepticus) but without necessarily involving loss of awareness between seizures. Finally a subsequent paper referenced in the same section by Tellez-Zenteno and colleagues of a case report of a patient with levetiracetam-induced status gelasticus had previously correctly referenced the origin of the term, “status gelasticus”. All in all, these are the surprising circumstances of a simple oversight by Tellez-Zenteno and colleagues.

Furthermore, Tellez-Zenteno and colleagues mention that in many cases extrahypothalamic coverage should be performed to evaluate spread of seizures and potential extratemporal onset as suggested by Cascino and colleagues. I believe this was exactly the opposite of what Cascino and colleagues were trying to convey.
In their series, seven patients with hypothalamic hamartomas who underwent intracranial electroencephalography (EEG) monitoring and focal cortical resection (not hypothalamic hamartoma surgery) did not experience any improvement in their seizures. Since then it has become far clearer that in patients with hypothalamic hamartomas, the seizures and epilepsy emanate from there regardless of what the scalp EEG findings show. Intracranial EEG monitoring with rare exceptions should not be performed in hypothalamic hamartoma patients. Unfortunately we continue to see hypothalamic hamartoma patients referred from other institutions that have undergone one or more intracranial EEG monitoring and unsuccessful, tragic, subsequent focal cortical resections (frontal/temporal/parietal lobes) who were then subsequently cured by hypothalamic hamartoma resection. Although these beliefs are well known within “hypothalamic hamartoma circles”, it is not as clear to the general neurology and epilepsy community and this knowledge must be disseminated.

Ergo more knowledge and education on gelastic seizures, status gelasticus and hypothalamic hamartomas should be welcome as this probably under-recognized condition is well-known to be either misdiagnosed, be very delayed in its diagnosis or often both which can be devastating as early (appropriate) surgical treatment is known to improve or prevent the frequently associated epileptic encephalopathy.7,8

References