The years later he turned his time, a full movement. The patient was aware were no behaviours often shouted and intermittent snoring and intermittent hypotension. Electromyography showed distinct episodes of the night cerebral sphincter EMG was again abnormal,

Crying seizures after cerebral infarction

Ictal crying is a relatively rare epileptic condition. There have been 11 such cases reported before 1993. Recentlly seven more cases were reported by Munschauer et al. The aetiology of the crying seizures in these patients was attributed to tumour, vascular malformations, or mesial temporal sclerosis. There have been no previous reports of ictal crying after cerebral infarction. We report a case of crying seizures in a patient after cerebral infarction with a seizure focus in the right temporal region. Three weeks after an inferior wall myocardial infarction, a 66 year old right handed man developed dizziness and a left hemiparesis that resolved over a five day period. He was placed on aspirin (325 mg twice daily). The patient did well until two years later when he awoke with a left hemiparesis. There was no sensory loss or ataxia. Carotid doppler imaging, trans-thoracic echocardiography, and cardiac monitoring were unremarkable. Brain MRI showed multiple focal ischaemic changes in the white matter, most notably in the posterior limb of the right internal capsule, and mild diffuse cerebellar atrophy. The patient was placed on ticlopidine (250 mg twice daily).

The patient did well until seven months later when he began exhibiting unusual behavioural episodes including inappropriate speech, episodes in which he would suddenly stop talking and stare, and episodes of eye deviation to the left. On admission to hospital he was seen to exhibit repeated episodes of deviation of the head to the left during which time he would begin crying. During these crying episodes he remained alert, answered questions appropriately, and demonstrated subjective experience of sadness or depression. Electroencephalography performed during these episodes showed ictal discharges occurring repeatedly over the
right temporal area (figure), confirming the occurrence of partial seizures with ictal crying. He was loaded intravenously with phenytoin with resolution of the crying seizures. Brain CT showed periventricular leukomalacia and mild diffuse cerebral atrophy. Neurological examination showed a left hemiparesis, unchanged from previous examinations.

Crying can represent an affective behavioural manifestation of sadness or depression, can occur as an ictal event or postictal phenomenon, or can occur in association with a non-epileptic seizure. Outbursts of involuntary and uncontrollable laughing or crying may also accompany the pathological emotion seen in patients with pseudobulbar palsy, which may occur in vascular, degenerative, or demyelinating diseases of the brain.

The neuroanatomical localization of crying remains unknown. In most patients with crying seizures, the EEG has provided evidence of a frontotemporal seizure focus in the non-dominant cerebral hemisphere. Evaluation of our patient also showed the presence of a seizure focus in the temporal region of the non-dominant cerebral hemisphere, presumably caused by ischaemic cerebrovascular disease as there was no evidence of an intracranial tumour, vascular malformation, or infection. This is in support of the concept that the limbic areas in the non-dominant hemisphere are related more to the experiencing of negative emotions, such as fear and anxiety, than positive emotions such as happiness.14

To our knowledge, this is the first reported case of crying seizures after cerebral infarction. As sudden outbursts of uncontrollable crying may also accompany the pathological emotion seen in patients with pseudobulbar palsy, the differentiation of these two possibilities with EEG recordings should be considered.

**Neuropathological examination of the resected tissue**

The pathologically diagnosed lesion had a broad base of the tumour mass. Examination of the resected tissue showed a round amelanotic melanoma involving the wall of the right maxillary antrum extending through to the infraorbital foramen. This tumor was thought to be expanding tumour along the course of the infraorbital nerve and a palliative course of radiotherapy to the right side of the face was commenced. The patient died 11 months after presentation.

**References**


Crying seizures after cerebral infarction.

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