

COMMENT. Pott's disease is a leading cause of paraplegia in developing countries, but occurs rarely in the US. This case may represent one of the youngest reported, according to the authors' review of published cases, totaling 243, and one, an 8-month-old Turkish infant. Greenfield JG, in his textbook **Neuropathology** (Baltimore, Williams & Wilkins, 1963, p 662-3), refers to associated myelin degeneration in the lateral columns, and compression and TB arteritis of the intervertebral radicular artery, accounting for some acute onset cases. Percival Pott, surgeon at St Bartholomew's Hospital, London, first described Pott's disease (1779, 1782) as paraplegia associated with tuberculous spinal caries. David JP (1779) also described the condition in France.

LIMBIC ENCEPHALITIS IN CHILDHOOD

Researchers at the University of Innsbruck, Austria, and 11 additional centers in Europe and Oxford, UK, report 10 patients <18 years of age with symptoms of limbic encephalitis (LE) of <5 years' duration and MRI evidence of mediotemporal lobe inflammation (hyperintense T2/FLAIR signal). The characteristic symptoms of LE were impairment of recent memory, temporal lobe seizures, and affective disturbances. Only 1 patient had a tumor, a neuroblastoma. Median age at disease onset was 14 years (range 3-17). Eight patients had defined autoantibodies (Hu, GAD, VGKC) known to be associated with adult-onset limbic encephalitis. Two patients identified with anti-NMDAR encephalitis without limbic dysfunction were not included. After a median follow-up of 15 months and corticosteroid or IV immunoglobulin treatment, 2 patients recovered, 8 remained impaired and one died.

Diagnosis of limbic encephalitis requires signs and symptoms predominantly (but not exclusively) of limbic involvement for < 5 years, MRI evidence of mediotemporal inflammatory disorder (hyperintense T2/FLAIR signal), and specific autoantibodies. A tumor and paraneoplastic disorder must be excluded. Other differential diagnoses include cortical dysplasia, infectious encephalitis (HSV, HHV6, VZV), anti-NMDAR encephalitis with no mediotemporal involvement, and chorea-acanthocytosis. (Haberlandt E, Bast T, Ebner A, et al. Limbic encephalitis in children and adolescents. **Arch Dis Child** Feb 2011;96:186-191). (Respond: Dr Christian G Bien, Dept of Epileptology, University of Bonn Medical Centre, Sigmund-Freud-Str. 25, 53105 Bonn, Germany. E-mail: christian.bien@ukb.uni-bonn.de).

COMMENT. Limbic encephalitis, an inflammatory disorder of paraneoplastic or non-paraneoplastic origin, and characterized by memory deficits, temporal lobe seizures or affective disorders, is recognized in adults but until recently, rarely diagnosed in children <18 years of age. Reporting the case of a 16-year-old boy who presented with subacute neuropsychiatric symptoms following a gastrointestinal illness, McCoy B et al, (**J Child Neurol** 2011;26(2):218-222) describe the disorder as an emerging pediatric condition. The MRI in this child revealed progressive hippocampal signal abnormality and swelling, and NMDAR antibody was detected in the serum. A series of 14 cases of limbic encephalitis in childhood reported from Japan revealed a predominance of seizures, disturbed consciousness, and frequent extralimbic signs as presenting symptoms. The majority had antecedent febrile illness, and a child-specific phenotype of

limbic encephalitis is suggested (Sakuma H et al, **Pediatr Neurol** 2010;43(3):167-172). In 10 children with unexplained encephalitis presenting with encephalopathy and status epilepticus, reported from Sydney, Australia, elevated voltage-gated potassium channel antibodies (VGKC Ab) were detected in 4/10 compared to only 1/69 controls. VGKC Abs are associated with limbic encephalitis in adults and in 4 children in the current study from Germany. Morales L et al (**Pediatr Blood Cancer** April 2011;[Epub ahead of print]) of the University of Chicago report a child who developed limbic encephalitis associated with anti-Hu antibodies, 6 years after her initial diagnosis of neuroblastoma and opsoclonus-myoclonus. Long-term follow-up of patients with opsoclonus is advocated.

BEHAVIORAL DISORDERS

BEHAVIORAL SYMPTOMS IN CINGULATE GYRUS EPILEPSY

Clinical and behavioral manifestations of cingulate gyrus epilepsy in 3 young adults are reported from the Epilepsy Center, University of Texas Southwestern Medical Center, Dallas. All 3 had MRI confirmed left antero-cingulate lesions, and seizures were controlled after lesionectomy. Two patients had auras of intense fear and laughter without mirth associated with cingulate gyrus epilepsy, and all 3 had hyperkinetic behavior and ictal vocalization consistent with frontal lobe epilepsy. The third patient described a “freezing” aura. Behavioral changes in 2 patients involved aggression, personality disorder, paranoia, and poor judgment postictally, sometimes lasting for days and socially destructive. One patient, a commercial pilot, as a passenger he was running uncontrollably up and down the aisle of the plane, resulting in emergency landing. Another patient was arrested for threatening security officers; a normal interictal EEG had previously led to the diagnosis of nonepileptic spells and a psychiatric personality disorder. Aberrant behaviors in all 3 patients completely resolved after lesionectomy.

The antero-cingulate gyrus is part of the Papez circuit that includes the hippocampal-mammillothalamic tract. The circuit has 3 functional subdivisions: premotor, affect division controlling emotion, and cognitive division involved in memory. In the 1989 proposed epilepsy classification, the ILAE Commission included cingulate epilepsy as a type of frontal lobe epilepsy. The present case report also includes in the cingulate epilepsy definition 1 or more of the following symptoms: a seizure with laughter without mirth, a sense of fear at the beginning of the seizure, or striking behavioral or personality changes lasting for weeks. Neuroimaging is useful in lesional cases but interictal EEG is usually nonspecific. (Alkawadri R, Mickey BE, Madden CJ, Van Ness PC. Cingulate gyrus epilepsy. Clinical and behavioral aspects, with surgical outcomes. **Arch Neurol** Mar 2011;68(3):381-385). (Respond: Rafeed Alkawadri MD, Epilepsy Center, 551 Cleveland Clinic Foundation, 9500 Euclid Ave, Cleveland, OH 44195. E-mail: droraf81@gmail.com).

COMMENT. “Fear” and automatisms at seizure onset are also familiar in children with complex partial seizures. In the proposed revised ILAE terminology (Berg AT et al. **Epilepsia** 2010;51(4):676-685), cingulate gyrus epilepsy may be classified as a “constellation” of symptoms or epilepsy with structural lesion. .