



New Criteria Published for Diagnosing the Clinical Syndrome of CTE During Life

Bethesda, Md. – For the first time, researchers have reached a consensus on the criteria for the clinical disorder associated with Chronic Traumatic Encephalopathy (CTE) brain pathology and its clinical manifestation during life – an important step in allowing scientists to fill knowledge gaps about the degenerative disease associated with a history of head impacts, such as contact sports and military service. This new consensus criteria was developed with the support of experts from the Uniformed Services University (USU) and was published March 15 in *Neurology*, the medical journal of the American Academy of Neurology.

“The National Institute of Neurological Disorders and Stroke (NINDS) Consensus Diagnostic Criteria for Traumatic Encephalopathy Syndrome (TES)” came together as a result of a consensus process led by Dr. Douglas Katz, professor of neurology at Boston University School of Medicine and first author of the *Neurology* paper. It was also the result of the ongoing NINDS-funded multi-center DIAGNOSE CTE research project, through which the “First NINDS Consensus Workshop to Define the Diagnostic Criteria for TES” was held in April 2019. During the workshop, a multidisciplinary panel convened to include 20 clinician-scientists and seven observers from 11 academic institutions across the country with expertise in neurology, neuropsychology, psychiatry, neurosurgery, and physical medicine and rehabilitation, who worked to develop this consensus. Dr. David Brody, director of the Uniformed Services University’s Center for Neuroscience and Regenerative Medicine (CNRM), was among those on the panel.

“I was honored to have the opportunity to participate in this important consensus process,” Brody said.

Currently, CTE can only be diagnosed after death through a neuropathological examination of brain tissue and, until now, there has been no accepted approach or agreed upon criteria for the diagnosis of CTE and its clinical manifestations during life.

To be diagnosed with TES (the clinical disorder associated with CTE) with these new criteria, the individual must have substantial exposure to repetitive head impacts from contact sports, military service, or other causes (e.g., a minimum of five years of organized football, with two or more of those years played at the high school level or beyond), and a progressive course of cognitive impairment (specifically in episodic or “short-term” memory and/or executive functioning, such as planning, organization, judgment, and multi-tasking) or neurobehavioral dysregulation (including explosiveness, impulsivity, rage, violent outbursts, and emotional lability) or both. Additionally, the criteria require that other neurologic, psychiatric, or medical conditions cannot be fully responsible for these clinical problems, although other neurologic and psychiatric conditions may be diagnosed together with TES.

This newly published consensus criteria will ultimately allow a better understanding of CTE’s clinical features and natural history, incidence and prevalence, as well as the causes and risk factors for developing this disease. It will also facilitate further CTE research. The authors of the paper also stress

that these criteria are not meant to be used by health care providers to make a clinical diagnosis of CTE, and these criteria will continue to be revised and updated as new research information becomes available.

Funding was provided by the National Institutes of Health (U01 NS093334).

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