

Ken Viste Memorial Lecture

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BRAIN INJURY REHABILITATION IS COMING OF AGE

Abstract:

Only a few years ago traumatic brain injury (TBI) was referred to as a “silent epidemic,” receiving proportionally little public recognition, health care industry attention or research dollars. Recently spurred on by concerns about the large number of soldiers experiencing TBI in the wars in Iraq and Afghanistan, and greater recognition of the effects of concussion in sports, there has been expanding public, political, professional and research interest in TBI. The modern beginnings of assessment, prognostication, treatment and rehabilitation of persons with TBI began around World War II but grew with the systematic prospective neurosurgical data banks developed in Glasgow and elsewhere, beginning in the 1960’s and 1970’s. More systematized rehabilitative care of patients with TBI began in the 1970s and 80s with some neuropsychological theoretical and empirical underpinnings but minimal early research evidence. Brain injury rehabilitation began maturing in the 1980s and 90s, with the assistance of new advocacy organizations, a growing rehabilitation industry, legislative efforts, more focused professional training, certification standards and research. In the last 30 years there has been accelerating growth and improving quality of research in a number of areas, such as epidemiology, pathophysiology, systematic assessment, neuroimaging, neuroprotection, critical care, pharmacologic treatment, cognitive rehabilitation, prognosis and outcome. Although still limited, the evidence is building that will serve as a better guide to best clinical practices. The future holds great promise for brain injury rehabilitation as biomedical and neuroscientific progress get caught up in the kind of exponential growth that has been driving advances in information technologies for many years.

Objectives:

Participants will:

1. appreciate the early beginnings of brain injury rehabilitation after WWII, including key advances in understanding TBI from pathophysiologic research and the prospective neurosurgical studies of the 1960s, 70s and 80s.
2. understand the rapid growth of systems of TBI rehabilitative care in the 1980s and 90s, supported by new advocacy organizations, a growing rehabilitation industry, legislative acts, certification standards, focused training, guided by some theoretical and empirical underpinnings but a limited research evidence base.

3. review the accelerating growth and improving quality of research on TBI in a number of areas such as epidemiology, pathophysiology, systematic assessment, neuroimaging, neuroprotection, critical care, pharmacologic treatment, cognitive rehabilitation, prognosis and outcome, with some key examples.

4. consider the future of brain injury rehabilitation and neural repair as biomedicine and neuroscience begin achieving the same accelerating pace of progress that information technologies and industry have been experiencing for a long time.