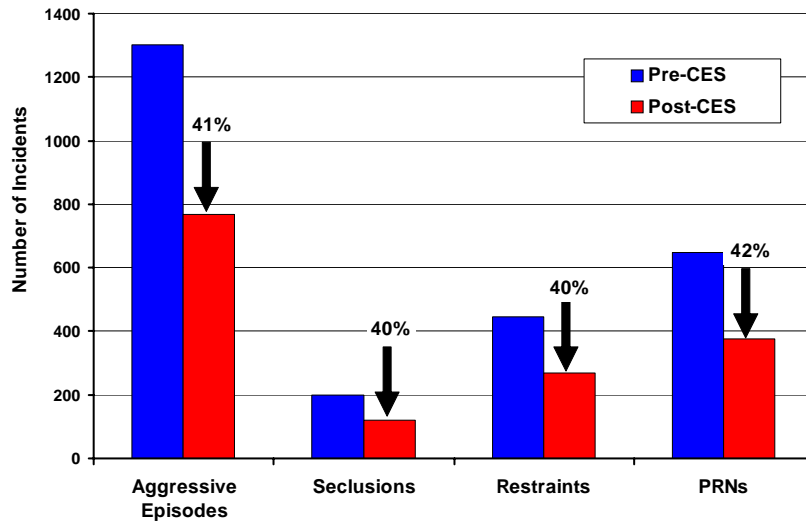
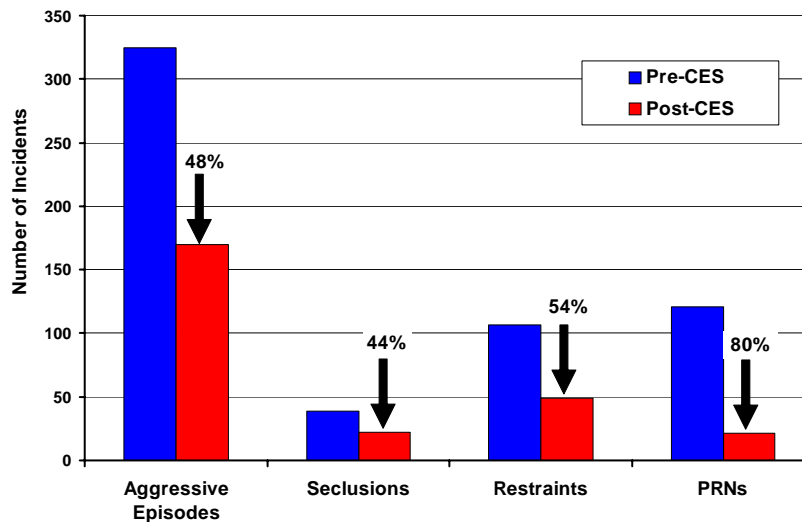


**Childs, A., and L. Price (2007). Cranial electrotherapy stimulation reduces aggression in violent neuropsychiatric patients. *Primary Psychiatry* 14(3):50-56.**

The study sought to determine if 3 months of daily cranial electrotherapy stimulation (CES) treatment reduced aggression in violent neuropsychiatric patients in a maximum security hospital. CES was used to treat 48 chronically aggressive neuropsychiatric patients in a maximum security psychiatric hospital. Retrospective chart review compared 3 months of pre-treatment with 3 months of active therapy. Early patients had responded positively to CES with a 41% reduction in episodes of violence ( $P < 0.001$ ), a 40% reduction in episodes requiring restraint ( $P < 0.001$ ) and seclusion ( $P < 0.05$ ), and 42% fewer as-needed emergency medications ( $P < 0.01$ ). A subgroup of 10 treatment-resistant psychotic patients, who attacked without warning or apparent motivation and were designated as having sudden assault syndrome, were 48% less violent on CES ( $P < 0.001$ ). CES has significant anti-aggressive effects in violent neuropsychiatric patients, who are often refractory to medication. This safe, easy-to-administer treatment can benefit long-term severely ill patients.



Changes in behavior and use of emergency medications before and after 3 months of CES (n = 48 patients).



Changes in behavior and use of emergency medications in sudden assault patients before and after 3 months of CES (n = 10 patients).