HORMONAL THERAPY SHOULD NOT BE USED TO TREAT EPILEPSY M. R. Sperling Thomas Jefferson Unversity, USA

michael.sperling@jefferson.edu

Circulating hormones influence seizure occurrence. In animal models of epilepsy, altering the balance between estrogen and progesterone serum levels may enhance or diminish susceptibility to seizure generation. Perhaps one-third of women experience seizure exacerbation at relatively predictable times of the month, closely related to the menstrual cycle. Other endogenous hormones other than reproductive hormones may also influence the expression of seizures, both when they occur and seizure severity. The relationship between hormones levels and seizures cannot be disputed. However, the use of hormones to treat people with epilepsy lacks scientific support. Published literature reports regarding hormonal therapy are largely uncontrolled and non-randomized. Moreover, the response to hormonal manipulation in these uncontrolled reports, which have employed progesterone in various formulations in women with epilepsy, has at been modest, and seizure freedom has not been achieved. The duration of response is unknown, since all trials have been conducted for brief periods of a few months. The use of other hormones to treat epilepsy remains unexplored in a rigorous fashion. Therefore, one must conclude that use of hormonal therapy lacks adequate justification. Moreover, the use of hormones may delay implementation of more effective therapy, such as epilepsy surgery, in patients who are resistant to conventional antiepileptic drug therapy to their detriment.