COMBINED OCCIPITAL NERVE/SUPRAORBITAL NERVE STIMULATION FOR TREATMENT OF REFRACTORY HEADACHES: INITIAL ADOLESCENT EXPERIENCE (AGES 12-17)

S. Linder[1], K.L. Reed[2]

[1]Dallas Pediatric Neurology Associates, [2]Anesthesiology, Presbyterian Hospital of Dallas, Dallas, TX, USA

Objectives: Assessment of the efficacy and safety of dual occipital-supraorbital nerve stimulation in adolescent headache patients.

Subjects and methods: Adolescents´ ages 12-17, including 10 females and 3 males were screened for implantation of occipital-supraorbital nerve stimulators. Each headache subject had failed standard therapies including dyhydroergotamine 45.

Trial stimulators were placed across the occipital and supraorbital nerves. Criterion for a positive response was 75% improvment after a 3-5 day trial. Responders had an IPG (implantable pulse generator), which responds to an external programming computer, placed in the gluteal region.

Results: Eleven of 13 subjects had IPG implantation. Nine of 11 have continued to have good response. Two subjects initially had good response but later failed.

Sixty percent remain headache free. Twenty percent are still having some headaches but have had a 50% improvement. All were able to decrease their need for medication or stop medications entirely. All returned to school. Before implantation all were on a modified school program.

Conclusion: Combination occipital -supraorbital nerve neurostimulation provides an effective alternative treatment for adolescent patients with chronic severe headaches.