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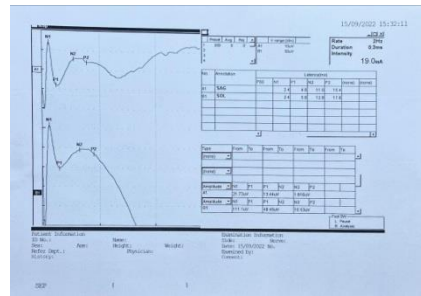
### **Background&Aim:**

Migraine pathogenesis is still mystery; many important structure is involved, trigeminal system, brain stem and cerebral cortex. We aimed to clarify any differentiation in between migraine with or without aura on be half of trigeminal nevre somatosensorial evoked potentials (tSEP).

### **Methods:**

37 (26 female, 11 male) sufferer of migraine (28 without aura and 9 with aura) people and 30 (21 female and 9 male) healthy volunteer were included.

tSEPs were recorded in all migraine sufferers (with or without aura) during interictal period and all healthy volunteers. Especially, patients with aura were tried to be recorded at the phase of aura in 24h. Distal latencies of N1, P1, N2 and P2 waves, excitability thresholds, stimulation intensities as well as N1/P1 and N2/P1 amplitudes were measured.



### **Results:**

The results of total migraneous patients and control group showed no differences in comparison of ipsilateral latencies with N1-P1 and N2-P2 amplitudes and distal latencies. But sensory excitabilation and stimulation thresholds were differed in two groups on be half of increased migraine attack numbers and prolonged migraine years.

And important differences were faced in migraine groups with or without aura phase. Sufferers with aura yielded increased N1-P1 and N2-P2 latencies and decreased amplitudes. (p=0.29).

### **Conclusions:**

This study showed and important differences between migraine with and without aura during interictal period or near attack period on be half of tSEP investigations. This may indicate that aura phase affects on tSEP and this effect is measurable on the pathways of the cortical and brainstem and may be peripheral trigeminal neuronal traces during attacks and interictal periods.

**Key words:** migraine, aura, trigeminal somatosensory evoked potential