

EXTEROCEPTIVE SUPPRESSION OF TEMPORALIS MUSCLE ACTIVITY IN DIFFERENT TYPES OF HEADACHE

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Exteroceptive suppression (ES) of temporalis muscle activity, particularly the multisynaptic ES2, has been reported to be significantly reduced in tension type headache, but not in migraine (1). The purpose of this study was to evaluate the usefulness of this method in other types of headache. We used the single shock technique described by Schoenen et al. (1987) (1).

The mean duration of ES2 was calculated in 23 normal subjects and 60 patients with headache of different etiology excluding those without a recordable ES2. The normal range was 35.7 \pm 8.12 ms. The mean durations of ES2 were as follows in the different subgroups: migraine (11 patients) 39.1 \pm 6.53 ms; lumbar puncture headache (15 patients): 33.9 \pm 6.62 ms; headache in meningitis (8 patients) 34.8 \pm 5.25 ms; tension type headaches in different stages of HIV infection (10 patients): 34.6 \pm 6.2 ms; tension type headache in 15 patients: 32.1 \pm 5 ms; symptomatic headaches of different etiology (12 patients) 35.3 \pm 8.13 ms.

ES2 was absent in 7 of 15 tension type headache patients, in 1 normal control and intermittently absent in 2 further normals.

Although we could confirm absence of ES2 in about half of the patients with tension type headache, ES2 does not seem to behave differently when compared to normal controls in a variety of other headache disorders. These data support the concept of ES2 as an interface between psychogenic and myogenic factors particularly in tension type headache.

1. Schoenen J, Jamart B, Gerard P, Lenarduzzi P, Delwaide PJ. Exteroceptive suppression of temporalis muscle activity in chronic headache. *Neurology* 1987, 37:1834-7.