Partial versus complete resection of the m. corrugator in the surgical treatment of migraine headaches

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Objective
This prospective, randomized study was conducted to compare the efficacy of a complete, transpalpebral resection of the corrugators with the partial removal of these muscles at their medial and lateral aspects thus performing a complete denervation.

Methods
diagnosis of migraine / neurologist
Botox Injections / \( n = 75 \)
\( \downarrow \)
8 weeks
\( \downarrow \)
\( n = 64 \)
complete partial
corrugator resection
follow up 12 month
transpalpebral approach for complete corrugator resection

Demographics
f 57 / m 7
age 21-61
mean age 52.3 ± 2.8
• migraine attack frequency
• pain intensity
• medications

Linkage analysis
• Advanced age is a negative predictive factor
• 89 % of „failures“ were grade IV migraine patients
• 78 % of „failures“ had a migraine history > 20 years

Results

Conclusions
• no significant differences between partial versus complete resection
• no clinically detectable perineural scarring
• partial resection is easier and quicker with less swelling
• the selection of patients is more relevant than the surgical method

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