

study, where we reported 283 cardioembolic strokes.<sup>1</sup> Of those patients, 27.9% were taking low to moderate doses and 3.2% were taking high doses of statins prior to stroke. The percentage of patients with mild stroke severity (NIH Stroke Scale score less than or equal to 5) was higher in the high-dose statin group, followed by the low- to moderate-dose statin group and the nonstatins group (55.6%, 44.3%, and 34.4%, respectively,  $p = 1.164$ ). After multivariate adjustment, pretreatment with statins was associated with a higher probability of mild stroke severity, reaching statistical significance only in the low- to moderate-dose statin group (odds ratio [OR] 1.812, 95% confidence interval [CI] 1.014–3.239 for the low to moderate doses and OR 3.205, 95% CI 0.804–12.770 for the high doses). We could not perform the propensity score in this group due to the limited sample size. These results suggest that pretreatment with statins is related to lower stroke severity also in larger strokes, which confirms previous experimental<sup>4</sup> and clinical studies.<sup>5</sup> An observational study found more extensive collaterals in patients taking statins before stroke.<sup>6</sup> Whether starting statin therapy in the acute phase of ischemic stroke is associated with better outcome needs to be addressed in future clinical trials.

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## PROVOCATION OF MIGRAINE WITH AURA USING NATURAL TRIGGER FACTORS

**Paul R. Martin, Brisbane, Australia:** It is interesting to see Hougaard et al.<sup>1</sup> use a novel provocation technique to investigate migraine triggers because this is a neglected area of scientific inquiry. However, their suggestion that provocation studies of “natural” triggers have not been carried out previously is misleading. These studies have validated that stress, “visual disturbance,” noise, and hunger are natural triggers.<sup>2</sup> One provocation study manipulated flicker, glare, and eyestrain and found—contrary to the contention of Hougaard et al.—that these did induce headaches.<sup>3</sup> Hougaard et al. concluded that it is not enough for patients to identify triggers; rather, they should challenge themselves with the trigger to confirm its authenticity. Many years ago, I encouraged patients to engage in “behavioral experiments” to clarify the genuine triggers.<sup>4</sup> The authors suggested that if provocation reveals that the trigger is not a trigger then patients should be advised not to avoid it. Although this seems sensible, we argued that learning to cope with triggers (LCT) is a superior approach to advising avoidance of all triggers.<sup>5</sup> LCT involves avoiding triggers that are detrimental to health but using graduated exposure with other triggers to desensitize and increase tolerance.

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## Provocation of migraine with aura using natural trigger factors

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