

Late-life Migraine Accompaniments as a Cause of Unexplained Transient Ischemic Attacks

Canadian J. Neurological Sciences 1980 February; 7 (1): 9-17.

We often struggle in diagnosing patients >40yrs of age who present with transient neurological symptoms with migrainoid features; it is often difficult to delineate between migraine with aura vs. TIA if in the setting of normal imaging. This study was conducted in 1980 when the imaging modality of choice was CTA (i.e., the equivalent to a brain MRI then), and the overall purpose of the study was to describe (in a case series) the common neurological symptoms and/or deficits, as well as their characteristic features, that may accompany classical migraines.

Study Design and Results: This study was a descriptive case series that reviewed 120 cases (35 of which are included) of patients who had transient episodes resembling neurological accompaniments of migraine (though not including scintillating scotoma, as these were typical and recognized features of migraine with aura) for the first time after 40 yrs old. Of the included patients, 75% had an angiogram performed, which the author used as a critical diagnostic tool for the exclusion of other causes for their presentations. Included patients were not required to have a headache at the time of presentation, or a prior history of migraines, but all had to have experienced similar types of migraine accompaniments (i.e., prior neurologic symptoms) in their past. As described in the case series presented in the paper, migraine accompaniments manifested in the form of the following neurologic sequelae:

- visual accompaniments
- visual and paresthesias
- visual and speech disturbance (dysarthria or aphasia)
- visual and brain-stem symptoms
- visual, speech, and paresthesias
- visual, paresthesias, speech disturbance, and paresis
- recurrence of old stroke deficits
- miscellaneous

Cases were included based on the presence of the above clinical features. More specifically, however, these migraine accompaniments were felt to have the following key features: 1) build up of visual scintillations (the features gradually expand to affect a larger area of the visual field), 2) "march" of numbness gradually spreading over the body or to the contralateral side, 3) duration of 15-25 minutes, 4) march from one accompaniment to another, 5) a prior history of similar or almost identical symptoms, 6) repeatedly having good recovery from symptoms, and 7) normal angiography (**see Table 3, p. 17**). These features helped to distinguish migraine accompaniments from TIAs and other primary vascular etiologies. Of note, the author recognized that thalamic strokes could resemble a "march" of symptoms, but rarely. Otherwise, all of the cases described were thought to be more consistent with late-life migraine accompaniments based on the above features. Importantly, headaches were only found in 50% of cases.

Conclusions: The study highlighted the importance of looking for typical features of migraine accompaniments, including the buildup of symptoms related to visual scintillations, march of paresthesias, and progression from one accompaniment to another. Further, in a patient presenting with the above features, a prior history of 2 similar episodes or the presence of concurrent migraine-like scintillations helps to facilitate the diagnosis. Regardless, ruling out vascular conditions (embolism, thrombosis, dissection), coagulation disorders, and seizures is still necessary. Finally, it is worth noting that aside from another, similar case series conducted by CM Fischer a few years after this study, very few (if any) additional case series have been added to the literature, given the completeness of his work.

Summary completed by Arathi Nandyala, M.D.

Additional Reading, if interested:

- 1) C.M. Fisher. **Late-Life Migraine Accompaniments—Further Experience.** *Stroke* (1986), 17 (5): 1033-1042
- 2) William B. Young. **A Knockout Punch: C. Miller Fisher's Migraine Accompaniments.** *Headache* (2008), 48: 726-727.