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## REFERENCES

1. Tinker JH, Sharbrough FW, Michenfelder JD: Anterior shift of the dominant EEG rhythm during anesthesia in the Java

- monkey: Correlation with anesthetic potency. Anesthesiology 46:252–259, 1977
- Jung R: Neurophysiologishe Untersuchungsmethoden. Bergman GV Handbuch d. inn Med., Neurologie 1, Berlin, Springer-Verlag, 1953
- 3. Aird RS, Gastaut Y: Occipital and posterior electroencephalographic rhythms. EEG Clin Neurophysiol 11:637-656, 1959
- 4. Stockard J, Bickford RG: The neurophysiology of anesthesia, A Basis and Practice of Neuroanesthesia. Edited by Gordon E. New York, Excerpta Medica, 1976, p 6

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In reply: — Dr. Yanagida correctly states that amplitude-dominant EEG rhythms are not always seen posteriorly in awake man. We agree that posterior alpha amplitude dominance occurs in awake patients about 80 per cent of the time. Whether or not there is any awake posterior amplitude dominance in a given patient seems irrelevant to our observation that frontal amplitude dominance (never seen in awake normal man) develops during induction of anesthesia, and our use of this rather abrupt development as an endpoint for comparison with MAC. Dr. Yanagida has not always observed posterior amplitude dominance after premedication, but before "anesthesia." We wonder just how heavily his patients were premedicated, and whether loss of awareness of surroundings had

already occurred. Dr. Yanagida questions the closeness of the amplitude measurements shown in our figure 4. We agreed, and concluded in our paper that the shift *had not* yet occurred in figure 4, but was present by figure 6, where anterior dominance is obvious. We therefore considered the EEG change to have occurred midway between the two concentrations, at which time the anesthetic concentration was still well below MAC.

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