Teaching NeuroImages: Upright-supine test to evaluate vertical diplopia

A 36-year-old woman presented with vertical diplopia, nausea, and disequilibrium. Maddox rod testing was performed in the upright and supine positions (figures 1 and 2).

Skew deviation is a vertical misalignment caused by a supranuclear lesion in the vertical vestibulo-ocular reflex pathways, including the vestibular nerve, brainstem, or cerebellum. It arises from perturbed utricular inputs, and the amplitude of the ocular deviation is therefore sensitive to gravitational forces.1 The upright-supine test helps localize the cause of vertical diplopia by distinguishing skew deviation from infranuclear causes.2 With skew deviation, the vertical deviation is substantially reduced when the patient is supine, whereas with infranuclear lesions it is not.

AUTHOR CONTRIBUTIONS
Nailyn Rasool: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval. Sashank Prasad: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, study supervision.

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REFERENCES
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