

CLINICAL PRACTICE



How Do I Examine for a Supranuclear Gaze Palsy?

Tim Anderson, FRACP, MD1,*

Abstract: Classically, a supranuclear gaze palsy (SNGP) is a conjugate gaze limitation that can be overcome (i.e., corrected) by the vestibulo-ocular reflex (VOR). It involves vertical eye movement most commonly. In practice, SNGP can be encountered as a limitation in excursion of self-generated conjugate saccades (fast eye movements) that can be improved or overcome with verbal command, visual targets, or VOR. Thus, mild SNGPs may be overcome with verbal commands (e.g., "look down") or visual targets (e.g., "look down at my hand"), whereas moderate SNGPs may be overcome by smooth pursuit mechanisms and following a visual target (e.g., "look at my pen as it moves") and severe SNGPs can only be overcome with the VOR (i.e., fixating straight ahead while the head is passively rotated). So, it is best to assess for an SNGP in a hierarchical fashion; initially assessing saccades to command, then saccades to visual targets, then smooth pursuit of a target, and finally with the VOR.

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Supporting Information

A video accompanying this article is available in the supporting information here.

Video. How do I examine for a supranuclear gaze palsy (SNGP)? Assessment is best undertaken in a hierarchical way; initially assess saccades to command, then saccades to targets, then smooth pursuit of a target, and finally with the vestibul-ocular reflex (VOR).

Keywords: supranuclear gaze palsy, saccades, smooth pursuit, vestibulo-ocular reflex, VOR.

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¹Christchurch and the New Zealand Brain Research Institute, University of Otago, Christchurch, New Zealand

^{*}Correspondence to: Dr. Tim Anderson, Christchurch and the New Zealand Brain Research Institute, University of Otago, 66 Stewart Street, Christchurch 8011, New Zealand; E-mail: tim.anderson@cdhb.health.nz