Suppression Head Impulse Paradigm (SHIMP)

SHIMP test provides additional information about the vestibulo-ocular reflex system and is especially useful in patients with bilateral loss.

**Purpose:**
Identify if vestibular residual function is present. It also is a “covert saccade killer” for unilateral losses.

*How is it different than head impulse test?*
Head impulse uses an earth fixed target and SHIMP uses a head fixed target.

“Detecting residual vestibular function in patients with vestibular loss is of great clinical importance for vestibular rehabilitation, as it may help patients in compensating for their vestibular deficit by triggering early catch-up saccades.”**

**Within Normal Limits**
- **vHIT** — gain within normal limits and none to very few catch-up saccades
- **SHIMP** — gain within normal limits and downward anti-compensatory saccades with large amplitudes

**Bilateral Vestibular Loss**
- **vHIT** — abnormal gain and presence of covert or overt catch-up saccades
- **SHIMP** — abnormal gain on both sides — if anti-compensatory saccades are present it is a sign of residual vestibular function (right side has vestibular function, left side is questionable)
Understanding Bilateral Loss:

Rare
- 0.6 to 4% of patients

Symptoms
- Gaze instability with rapid head movements
- Oscillopsia
- Imbalance and unsteadiness
- Worsens in the dark

Causes
- Ototoxic Drugs
- Infection such as Meningitis
- Congenital disorders
- Autoimmune disorders
- Degenerative disorders
- Co-occurrence with cerebellar ataxia (CANVAS & Superficial Siderosis)

Interpretation:

For bilateral loss – is it paralysis or paresis?
Catch-up Saccades present indicates vestibular function
No catch-up saccades present indicates vestibular loss

References

