

Erratum

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On page S152 the text of Abstract 1, The Skull Vibration-Induced Nystagmus Test (SVINT): Characteristics, by Georges Dumas, is incorrect. The correct Abstract 1 should read as follows:

ABSTRACT 1

In patients with unilateral vestibular lesions (uVL), a 100 Hz bone conducted vibration (BCV) induces instantaneously a SVIN beating away from the lesion in all patients with total unilateral vestibular loss (tUVL) (Translabyrinthine approach, Vestibular neurectomy)(100% of cases) and most often (91% of cases) in patients with partial unilateral vestibular lesions (pUVL)[(Vestibular neuritis, intratympanic gentamicin, temporal bone fracture, recurrent vestibulopathy, Menière's disease (MD)]. In MD, SVIN may beat ipsilaterally in 2%–28% of cases. The SVIN SPV is significantly more efficient on mastoid stimulation (RM, LM) than on Vertex (Vx) or cervical posterior lower part stimulation ($p < 0.01$). The optimal frequency is significantly 100 Hz (no responses are identified at 10 or 500 Hz). The SVIN SPV is in tUVL around $10^\circ/s$. In superior canal dehiscences (SCD) SVIN beats conversely most often ipsilaterally in 82% of cases when Vx is stimulated and SVIN-SPV is $4.52 \pm 1.7^\circ/s$ ($n=14$). Stimulation of mastoid may give a variable direction of the SVIN depending on the side stimulated. So the Vx location is given as referential. The optimal frequency is around 400 Hz and good responses are identified between 60 to 800 Hz. There is an extension of frequency sensitivity toward very high frequencies. The optimal location for stimulation is the Vx. Suboccipital locations have also been described as efficient.

In a recent study in 39 uSCD, it was observed a direction changing SVIN following stimulus location (right mastoid vs Left mastoid) in 51% of cases and depending on stimulus frequency (30 Hz vs 100 Hz and 100 Hz vs 300 Hz) in 25% of patients. An after nystagmus was observed in 25% of cases. These last data must be interpreted in light of a Bone conducted Tullio Phenomenon (BCTP). Recent physiological data from Iversen et al. have showed after air or BCV stimulations pumping mechanism at the level of the dehiscence and creation of an endolymph flow which deflects the cupula depending on the size of the dehiscence, the location and the frequency of the stimulus.

SVIN acts as a vestibular Weber test. It is a useful first line vestibular Test in clinical practice for UVL patients and it is interesting in SCD diagnosis when interpreted as a BCTP among the armamentarium of other bedside tests.