

البحث الاول

Surgery of the semicircular canals.

Introduction: Surgery of the semicircular canals is seeing a revival as recently we have witnessed the development of specialized surgeries for each canal. **Objectives:** The aim of this work is through a review of the literature to describe these different surgeries while stressing on certain surgical aspects, their respective indications, results and their risks. **Discussion:** 1: The surgery of the posterior canal relates to the benign paroxysmal positional vertigo resistant to the medical treatments. The results are very good but the indications have become rarer since the introduction of the repositioning maneuvers. 2: The surgery of the lateral canal is the most frequent and the oldest because of chronic otitis and especially cholesteatomas. It is now well codified and is subject to various factors. Plugging of the lateral canal in Menière's disease has just been described and interesting results on vertiginous crises have been reported. Its interest and its place in the treatment of this disease are still to determine. It can be an alternative to surgical management but also to the gentamycin injection. 3: The dehiscence of the superior semicircular canal must be systematically sought after when confronted with a Menière-like disease, a suspicion of perilymphatic fistula or a conductive deafness evoking an otosclerosis with preserved stapedial reflexes. Very often these dehiscences of the superior canal are asymptomatic. High density scans of the petrous bones provide the diagnosis but it is necessary to obtain a 3D view to ascertain the dehiscence. A radiological classification of the dehiscence in 3 types has been proposed. It appears to be of help during surgery. Videonystagmography with and without vibrator and vestibular myogenic evoked potentials allow the determination of the side responsible for the symptoms in case of bilateral dehiscence. The surgery usually through a middle fossa approach will be proposed only to the symptomatic and incapacitated patients. The results are promising. 4: Finally the authors discuss the cochlear risk of this surgery and the types of material used to occlude or cover the canal. **Conclusion:** The otologists must generally know these indications as this type of surgery entails very good results with a relatively moderate risk on hearing.