A Novel Device for the Management and Removal of Cerumen

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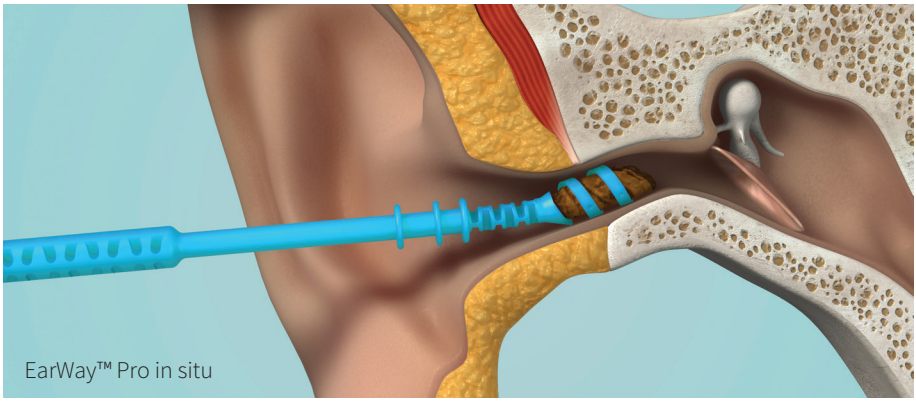
INTRODUCTION: EarWay™ Pro is a device intended for the evacuation of cerumen from the external auditory canal. It offers a novel approach for the removal of cerumen in the office. The helical open profile tip engulfs the cerumen which is then pulled out of the ear. The device is made of a flexible material which is intended to minimise pain and prevent injury to the external auditory canal.

METHODS: The research was conducted in the Department of Otolaryngology Head and Neck Surgery in Kaplan Medical Center. Patients with cerumen were treated with the EarWay™ Pro device. The efficacy, safety and pain were evaluated by scales developed for the purpose of this study. The cerumen obstruction scale was assessed before and after the procedure. Grade 0: total obstruction of the canal with cerumen - the tympanic membrane (TM) cannot be seen; Grade 1: only one quarter of the TM can be seen; Grade 2: two quarters; Grade 3: three quarters; Grade 4: four quarters - the complete TM can be seen; Grade 5: the canal is completely clean of cerumen.
improvement of at least two grades was regarded as success. All patients had their ear canal and tympanic membrane inspected with a microscope at the end of the procedure.

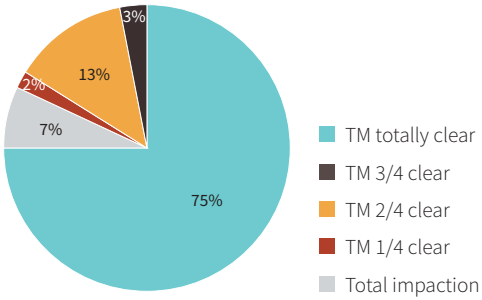


EarWay™ Pro in situ

RESULTS: A total of 59 ears in 46 patients were treated with the EarWay™ Pro device. The procedure was successful in 86.4% of the ears as defined by the cerumen obstruction scale. Patient statistics: 37% of the patients suffer from recurrent cerumen impaction and 32.6% use cotton swabs frequently. 28.3% complained of hearing loss. 88% of the ears had hard cerumen and 12% of the ears had soft to liquid cerumen. In 83% of the ears the patient did not feel any pain or felt mild pain during the procedure. In 17% of the ears the patient felt substantial pain. In 67.8% ears the cerumen was evacuated easily, in 28.8% ears the extraction was more difficult and in 3.4% ears (2 patients), the patients requested to stop the procedure due to sensitivity in the ear canal.

5% (3 patients) had a mild irritation and redness of the ear canal.There were no cases of lacerations or hematoma. The median time of treatment was 30 seconds (minimum 2 seconds and maximum 240 seconds, SD 42.1).

Post treatment results



POPULATION (n=46)	
Female	48%
Male	52%
Patient statistics	
Recurrent cerumen impaction	37%
Frequent use of cotton swabs	33%
Complaining about hearing loss	28%

CONCLUSIONS: EarWay™ Pro is an effective and safe device intended for the evacuation of cerumen. Unlike other tools which can be used only by Ear Nose and Throat specialists under direct inspection to prevent injury and pain, the EarWay™ Pro device can be used blindly. Therefore it can be used by general practitioners, paediatricians and audiologists.

Conflict of interest disclosure: the author of this poster consults for the company on clinical aspects