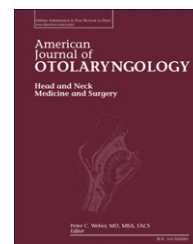


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## Letters to the Editor

Is MESNA an effective drug preventing recurrence of cholesteatoma after surgical treatment?



To the Editor:

We have read with pleasure the article by Kalcioğlu MT. et al. [1] which presents very important clinical observations. We would like to make some comments on this problem, basing on our experience and the literature review. MESNA (sodium 2-mercapto-ethane sulphonate) is a synthetic sulfur compound that produces mucolysis by disrupting disulfide bonds of the mucus polypeptide chain. MESNA can be used during ear surgeries (cholesteatoma or atelectasis), to make the dissection of keratinocyte layers [2,3]. But a question remains over the possible mechanism of action of MESNA in chronic otitis media. Therefore, we would like to share our opinion in this subject. Cholesteatoma is composed of matrix (stratified squamous keratinizing epithelium with keratinocyte), layers of exfoliated epithelium with keratin, perimatrix (connective tissue) and, in most of the cases, bacterial biofilm consisting of colonies of *Pseudomonas aeruginosa*, *Proteus mirabilis* or *Staphylococcus aureus* [3]. In chronic otitis with atelectasis, one of the issues is to remove the keratinocytes released from the retraction pocket. MESNA contributes to breaking of the disulfide bonds in exfoliated keratinocytes, and therefore facilitating their removal. In open-type cholesteatoma (common in children and in cholesteatoma recurrence) with presence of bacterial biofilm MESNA enables even easier and more efficient control of the exfoliated epithelium, especially in the environment with low pH [3]. In our department we administer MESNA into ears during the postoperative period. Its effectiveness will be assessed after its use in over a hundred patients [3]. In the light of our experience, we advocate the use of MESNA mainly in atelectatic ears, since, theoretically, it prevents implantation of keratinocytes in the postoperative tympanic cavity and recurrence of cholesteatoma [2-4]. Taken together, Kalcioğlu MT. et al. [1] presented an interesting information on treatment of cholesteatoma, but their results need to be interpreted with caution. In our opinion MESNA can be an effective drug preventing recurrence of cholesteatoma.

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Does MESNA application make sense in chronic otitis media surgery?



To the Editor:

We read the comments by Kuczkowski et al. regarding our manuscript published in the journal [1]. We would like to thank to the authors for their comments which in general support what we have observed in the use of MESNA. As the authors mentioned MESNA (sodium 2-mercapto-ethane sulphonate) is a synthetic sulfur compound that produces mucolysis by disrupting disulfide bonds. This way it facilitates the dissection of squamous epithelium in cases of retraction and adhesion. Moreover the likelihood of leaving some remnants of squamous epithelium may decrease, which is critical in terms of prevention of cholesteatoma recurrence.

As the authors have already quoted one of the articles published before [2], there is a clinical observation showing the practical use of MESNA in the middle ear surgeries. However, confirmation of these clinical observations is important, because MESNA also has hydraulic effect when injected, which may also help elevation of the retraction. This creates the critical question

as to whether MESNA helps dissection of the epithelium through its chemical or hydraulic effect. Confirmation of this needs histopathological studies as well as case control studies comparing MESNA versus saline.

In conclusion, from a practical point of view and based on our observation MESNA seems to help dissection of the squamous epithelium. It is encouraging to know that Kuczkowski et al. share the same idea with us and have a similar observation. We look forward to seeing their study results in the near future.

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