The Journal of Laryngology & Otology (2016), ***130***, *321*.
© JLO (1984) Limited, 2016
doi:10.1017/S0022215116000104

Double seal technique to obliterate the eustachian tube orifice: a novel method for the treatment of recalcitrant cerebrospinal fluid leak

Dear Editors,

Taghi *et al*. reported a technique for the treatment of refractory cerebrospinal fluid (CSF) rhinorrhoea after skull base surgery.[1] A patient underwent suboccipital craniotomy for decompression of a vascular loop from the Vth cranial nerve. In order to control post-operative CSF leakage and rhinorrhoea, middle cranial fossa craniotomy was performed.

Post-operative CSF leakage in this kind of surgery most commonly occurs via the opening of retrosigmoid or mastoid air cells, or through the nose via the eustachian tube.[2] Therefore, middle cranial fossa craniotomy may not have been a good option for treating this complication.

The authors performed eustachian tube closure to treat the CSF fistula, and it was quite successful. However, by leaving the middle ear with no ventilation, there is a very high probability of atelectasis and possible cholesteatoma. Conductive hearing loss is inevitable, too.

The possible tract of the fistula can be found easily using a mastoid approach,[3] and the leak can be treated using a muscle plug. If no specific site is recognised, the mastoid can be obliterated to treat CSF leakage.

Eustachian tube closure seems to have high morbidity for such a patient, and there are better options for treatment.

A KOUHI
V VAKILI ZARCH
Otorhinolaryngology Research Center, Department of Otolaryngology, Head and Neck Surgery, Amir-A'lam Hospital, Tehran University of Medical Sciences, Tehran, Iran

References

1 Taghi AS, Bentley M, Kuchai R, Saleh HA. Double seal technique to obliterate the eustachian tube orifice: a novel method for the treatment of recalcitrant cerebrospinal fluid leak. *J Laryngol Otol* 2015;**129**:1028–31
2 Becker S, Jackler R, Pitts L. Cerebrospinal fluid leak after acoustic neuroma surgery: a comparison of the translabyrinthine, middle fossa, and retrosigmoid approaches. *Otol Neurotol* 2003;**24**:107–12
3 Millen S, Meyer G. Surgical management of CSF otorhinorrhea following retrosigmoid removal of cerebellopontine angle tumors. *Am J Otol* 1993;**14**:585–9

The Journal of Laryngology & Otology (2016), ***130***, *321*.
© JLO (1984) Limited, 2016
doi:10.1017/S0022215116000116

Authors' reply

Dear Dr Kouhi and colleagues,

Many thanks for your correspondence regarding our article (titled 'Double seal technique to obliterate the eustachian tube orifice: a novel method for the treatment of recalcitrant cerebrospinal fluid leak').[1]

The patient underwent endoscopic obliteration of the eustachian tube orifice following the failure of a few major surgical attempts to resolve the cerebrospinal fluid leak. She also underwent an obliterative right mastoidectomy, which, unfortunately, also failed. She was offered revision surgery to obliterate the mastoid cavity once again using adjunct material, but she declined this particular intervention, despite the continuous symptoms of meningitis.

With regard to our technique, the patient was informed about the consequences of the procedure and was consented, as appropriate, after details of the surgical technique, alternative options, associated risks and complications had been fully explained. She made an informed choice about the treatment.

Our patient has been reviewed regularly since the procedure was undertaken. She has shown no symptoms or signs of morbidities, apart from the mild conductive deafness, which was expected (and she is coping well with this).

A TAGHI
Department of ENT, Imperial College London, London, UK

Reference

1 Taghi AS, Bentley M, Kuchai R, Saleh HA. Double seal technique to obliterate the eustachian tube orifice: a novel method for the treatment of recalcitrant cerebrospinal fluid leak. *J Laryngol Otol* 2015;**129**:1028–31

https://doi.org/10.1017/S0022215116000116 Published online by Cambridge University Press