The closure data are further weakened by performing PFO closure in individuals who were not oxygen desaturators; the oxygen desaturation index (ODI):apnea-hypopnea index (AHI) ratio was low, ranging from 0.34 to 0.87 at baseline. Patients with OSA and large right-to-left shunts who desaturate out of proportion to their apnea-hypopnea episodes would be more likely to benefit from PFO closure, in our opinion. Furthermore, we believe the treatment interaction between OSA and PFO is bidirectional. Existing case reports show that OSA symptoms may improve following closure of a PFO for other indications, but CPAP therapy for OSA can also suppress right-to-left shunting due to a PFO. The use of CPAP therapy in some, but not all, of the closure group may mask any observable benefit. Taken together, this could explain why no discernible improvement in OSA was observed following BioSTAR implantation in this study. It remains to be seen if a device that truly seals the PFO can improve clinical outcome in a carefully selected group of patients with OSA.

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REFERENCES

Response

To the Editor:

We thank Dr Hoole and colleagues for their comments regarding our article1 reporting the outcome of patent foramen ovale closure in a small number of patients with obstructive sleep apnea. The first issue raised was the choice of closure device. However, in the absence of data, we are unable to comment on the use of other devices in obstructive sleep apnea.

Second, although we selected patients with a large physiologic shunt assessed during wakefulness, we accept that it may have been more logical to select on the basis of physiologic shunt during sleep. This could be conveniently assessed as the oxygen desaturation index/apnea-hypopnea index ratio, although in the future, more direct measurement during sleep may also be possible.

Last, we concluded that patent foramen ovale closure on clinical grounds was not justified. While we maintain this stance, we do accept that a trial using a different device, and powered on appropriate pilot data with different entry criteria, could yield a positive result. However, our data give no reason to believe so, and the variation that we observed leads us to suspect that the sample size required would be large. For this reason, we are not planning to do such a study ourselves. Of course, we agree with their final comment that additional data are needed.

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Pharmacotherapy Refractory Insomnia in Soldiers With Traumatic Brain Injury

To the Editor:

The article by Collen et al1 in a recent issue of CHEST (September 2012) highlighted multiple important aspects of the...