
TECHNICAL NOTE

HIGH INSPIRED CARBON DIOXIDE LEVELS DUE TO MISPLACED CENTRAL TUBING OF THE ABSORBENT CANISTER

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Abstract

The authors present a case of unusual rise in inspired carbon dioxide due to misplaced absorbent canister.

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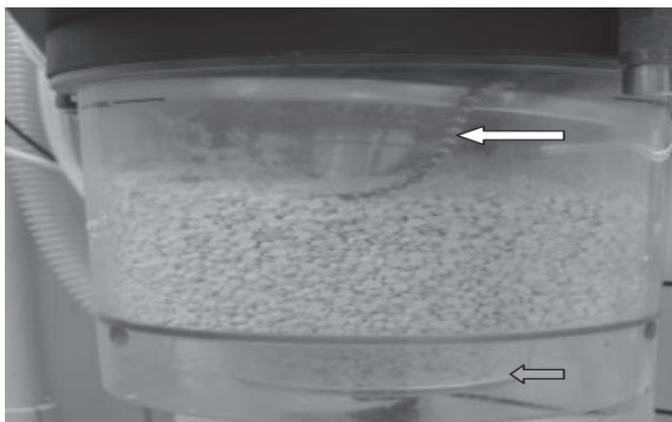
Key words: high ICO₂, sodalime, Fabius.

Technical Note

A thirty seven year old female was posted for left mastoidectomy. The procedure was initiated under general anesthesia using a Dragger Fabius Anesthesia machine. Pre use check of the machine was normal, however after induction and intubation, an increasing trend of the inspiratory carbon dioxide was noticed. This was followed by an increase in end tidal carbon dioxide after a few minutes. On inspection of the sodalime canister, we observed that the sodalime was filled till the base of the canister and the chain connected to the baffle system was inside the canister instead of being at the base (Fig. 1). Immediately the soda lime canister was replaced by another one. There was a quick return of the inspired carbon dioxide to 0 mmHg and the normalization of end tidal carbon dioxide level and the case conducted uneventfully thereafter.

Fig. 1

*White arrow-chain up in the
canister instead of being at the base
Grey arrow-absorber filled even in
the base*



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Upon inspection of the removed canister, an inadvertent oblique tilt of the central tubing was noticed, with the screen being turned upside down and hence placed above the soda lime. This arrangement caused a part of expiratory gases to bypass the absorber and reach the inspiratory limb to induce carbon dioxide rebreathing. This misplacement occurred

due to variations in the configuration of the screens in different types of canisters¹. We have notified this to the manufacturers and suggested modifications. Any wrong position of the canister that will cause the exhaled gases to bypass the sodalime could lead to a high inspired CO₂².

References

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