



Clinical Image

Dead Space Volume in N95 Masks

Espacio muerto en una máscara N95

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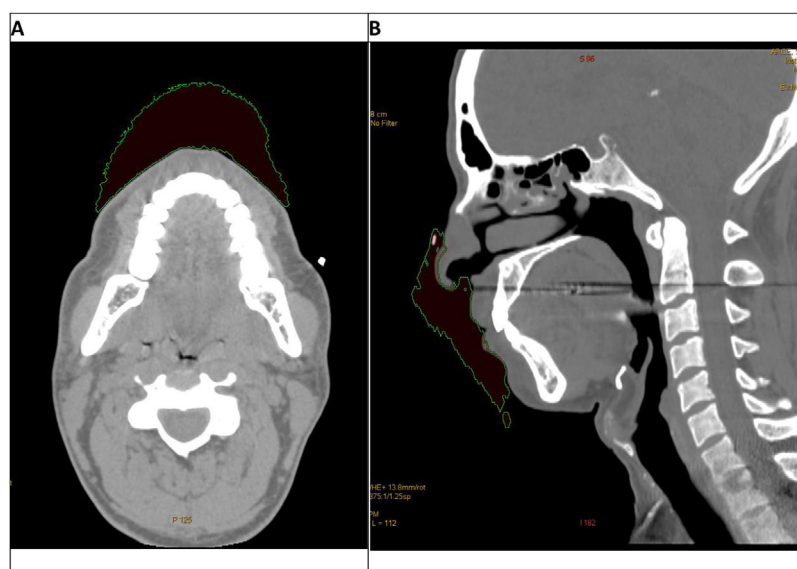


Fig. 1.

A health-worker's CT scan showing the air space between the mask (3 M Aura 1870+) and the face skin (138 mL). This volume remains relatively constant throughout the respiratory cycle, since its shape and material confers certain rigidity (*fig. 1*). Dead space of the respiratory airways is increased by about 50–80%, compensated with a raise in pulmonary ventilation to keep alveolar ventilation and CO₂ stable¹. This could have an impact in severely impaired respiratory patients.

Supports/contributions

None.

Reference

1. Hinds WC, Bellin P. The effect of respirator dead space and lung retention on exposure estimates. *Am Ind Hyg Assoc J.* 1993;54:711–22.

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