Title:

Monitoring of airway gas temperatures within endotracheal tube using rapid-response thermometer

Short title: Monitoring of airway gas temperatures

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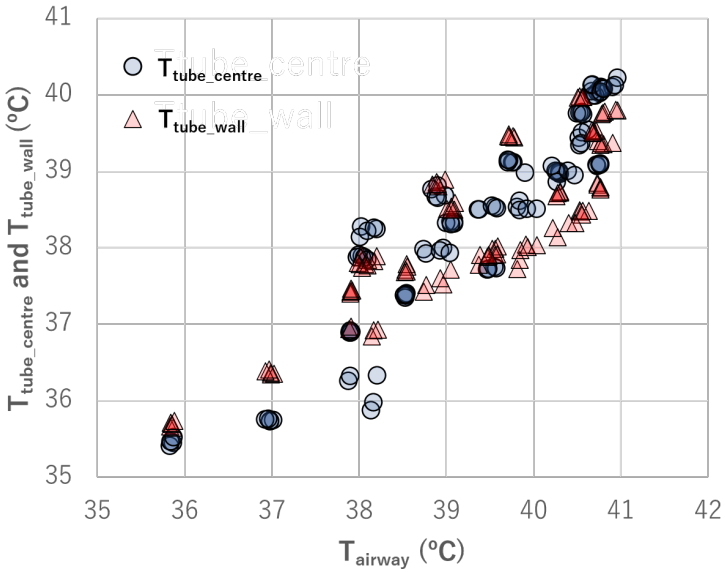
Supplementary Fig. S1:

Relationship between inspiratory T_{airway}, T_{tube_centre} and T_{tube_wall}.

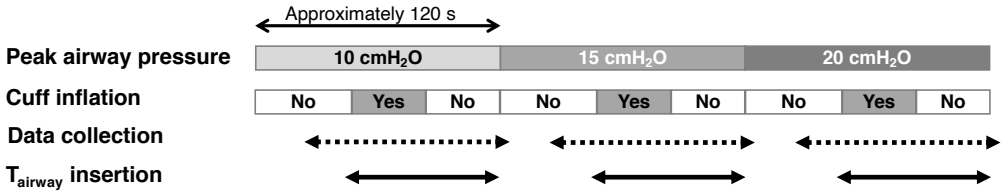


A representative scatter plot depicting the relationship between T_{airway} , T_{tube_centre} and T_{tube_wall} with a representative setting (peak inspiratory pressure, 10 cmH_2O; tracheal cuff, inflated; inspiratory time, 0.5 sec).

Abbreviations: T_{airway}, airway temperature; T_{tube_centre}, temperature at the centre of the endotracheal tube; and T_{tube_wall}, temperature at the wall surface of the endotracheal tube.

Supplementary Fig. S2:

Data acquisition cycles



Data acquisition was performed for a set of different conditions which is combinations of peak inspiratory pressures (10, 15 and 20 cmH_2O) and with/without inflating the endotracheal tube cuff. This cycle was repeated at each inspiration times (0.5 and 1.0 sec).