Supplemental digital content 3

Figure 1
Airway pressures above and below the obstructive stent plotted over frequency. PIP$_{UPPER}$ (peak inspiratory pressure proximal of the stenotic stent, A), PIP$_{LOWER}$ (peak inspiratory pressure distal of the stenotic stent, B), PEEP$_{UPPER}$ (positive end-expiratory pressure proximal of the stenotic stent, C) and PEEP$_{LOWER}$ (positive end-expiratory pressure distal of stenotic stent, D). Green circles represent observed values during superimposed high-frequency jet ventilation (SHFJV), and the mixed model prediction is shown as a green line. Red triangles are observed values from single frequency jet ventilation, with the red line indicating mixed model prediction. All observed values are mean and 95% CI. The predictive functions were derived from the mixed models that were applied on a continuous frequency spectrum (50 – 600 min$^{-1}$).
Figure 2

Three-dimensional illustration of the mixed model prediction for superimposed high frequency jet ventilation (SHFJV) in relation to stent inner diameter (stent ID) and frequency for $\text{PIP}_{\text{UPPER}}$ (peak inspiratory pressure proximal of the stenotic stent) and $\text{PIP}_{\text{LOWER}}$ (peak inspiratory pressure distal of the stenotic stent, both panel A) as well as $\text{PEEP}_{\text{UPPER}}$ (positive end-expiratory pressure proximal of the stenotic stent) and $\text{PEEP}_{\text{LOWER}}$ (positive end-expiratory pressure distal of the stenotic stent, both panel B). Pre-stenotic pressures are indicated as yellow-greenish surface, for post-stenotic pressure, the blue-purple surface applies. The predictive functions were derived from the mixed models that were applied on a continuous frequency (50 – 600 min$^{-1}$) and obstruction spectrum (2 – 8 mm).