

preparation and standardization

cadaver preparation + start of recording

recruitment: 2 sustained inflation maneuvers

P_{top} 25 and 30 cmH₂O; P_{start} 5 cmH₂O; $PEEP_{end}$ 5 cmH₂O; $t_{maneuver}$ 30 s; t_{pause} 5 s

15 min ventilation

V_t 6 ml/kg; f 12 min⁻¹; $PEEP$ 5 cmH₂O; I:E 1:2; P_{max} 40 cmH₂O

baseline PV diagram (before chest compression)

lung ultrasound

pneumothorax or model instability

exclusion

inclusion + randomization

2 min ventilation

V_t 6 ml/kg; f 10 min⁻¹; $PEEP$ 5 cmH₂O; I:E 1:5; P_{max} 60 cmH₂O

2 min chest compression only

chest compressions: 103 min⁻¹; depth 5cm; $PEEP$ 1 cmH₂O

lung ultrasound

2 min chest compression + ventilation

V_t 6 ml/kg; f 10 min⁻¹; $PEEP$ 0 cmH₂O; I:E 1:5; P_{max} 60 cmH₂O

lung ultrasound

mechanical properties testing

intervention phase

first PV diagram

2 min CPR segment

lung ultrasound

2 min CPR segment

lung ultrasound

ventilator settings:
IPPV; V_t 6 ml/kg; f 10 min⁻¹; $PEEP$ 0 cmH₂O; I:E 1.5/1.4; P_{max} 60cmH₂O
chest compressions:
103 min⁻¹; depth 5 cm

second crossover period * (2nd transport ventilator)

third crossover period * (3rd transport ventilator)

final PV diagram

* [detailed workflow as shown in "first cross over period"]