Date:

Patient’s sticky label

Time:

Name of RT / Doctor: **Non-Cardiac ERT / Cardiac ERT** (circle one)

**Extubation Readiness Test (ERT) Worksheet**

No

Do not start SBT

Address sedation with ICU team

Screen MV Patients Daily between 6am - 10am

Is SBS Sedation score -1 to +1?

Yes

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| 1. **ERT Screening and Readiness Parameters** | |
| No planned procedure with GA in the next 24 hours? | □ Yes □ No |
| No increase in ventilator settings for the past 12 hours? | □ Yes □ No |
| No muscle relaxants for the past 12 hours for patients who have received continuous IV muscle relaxants for at least 24 hours? | □ Yes □ No |
| Spontaneous respirations within acceptable parameters?   * Exhaled VT ≥ 4 mL/kg and PIP ≤ 20 cm H2O * PEEP ≤ 8 * SpO2 92 – 97% on FIO2 ≤ 0.5 in patients without congenital heart disease or patients with acyanotic heart defect * SpO2 ≥ 75% on FIO2 ≤ 0.4 in patients with cyanotic congenital heart disease * RR within target range for age?  |  |  | | --- | --- | | Age | RR | | < 1 year | < 30 – 40 /min | | 1 – 5 years | 25 – 40 /min | | 5 – 12 years | 20 – 25 /min | | > 12 years | 12 – 20 /min | | □ Yes □ No |
| Acceptable blood gas and lactate < 2 mmol/L within last 12 hours and with pH > 7.3? | □ Yes □ No |
| Acceptable haemoglobin > 8 g/dL? | □ Yes □ No |
| Low dose of sedatives and adequate level of consciousness   * State Behavioural Scale (SBS) sedation score -1 to +1 * Patient on less than 2 of these sedatives: Midazolam infusion ≤ 2 mcg/kg/min; Morphine infusion ≤ 20 mcg/kg/hr; Fentanyl infusion ≤ 3 mcg/kg/hr; Ketamine ≤ 10 mcg/kg/hr * Patient to be able to follow commands. For patients who are unable to follow commands, there should be spontaneous eye opening and/or spontaneous limb movements | □ Yes □ No |
| Stable hemodynamically and with acceptable blood pressure and HR?   * 1-2 vasoactive drugs with no increase in rate for the last 12 hours * Adrenaline ≤ 0.1 mcg/kg/min  |  |  | | --- | --- | | Age | Systolic blood pressure (SBP) | | < 1 month | > 60 mmHg | | 1 month to 1 year | > 70 mmHg | | > 1 year | SBP > 70 + (age in years x 2) mmHg |  |  |  | | --- | --- | | Age | Heart Rate | | < 1 year | 110 - 160/min | | 1 – 5 years | 95 - 140/min | | 5 – 12 years | 80 – 120/min | | > 12 years | 60 – 100/min | | □ Yes □ No |
| \*Adequate cough, gag and secretions management   * Suction not more often than every 2 hours unless otherwise agreed by ICU team | □ Yes □ No  □ Discuss with team to proceed |
| \*Ensure that there is presence of endotracheal tube leak of at least 10% with PIP at 20 – 25 cm  H2O   * In the absence of leak for patients intubated > 1 week, consider dexamethasone | □ Yes □ No  □ Discuss with team to proceed |
| RN aware of SBT and readily available to monitor patient? | □ Yes □ No |

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| If all the above checks in section “1. ERT Screening and Readiness Parameters” are **YES, begin Spontaneous Breathing Trial (SBT)**  **For NON-CARDIAC patients:**  **Perform SBT for 2 hours. Settings:** Mode of Pressure Support Ventilation (Spont), current FIO2, current PEEP and PS level based on ETT size  (ETT 3.0 – 3.5, PS = 10; ETT 4 – 4.5, PS = 8; ETT ≥ 5, PS = 6).  May titrate to a PS of 5 cm H2O if patient tolerates initial PS setting for 1 hour.  **FOR CARDIAC patients, perform cardiac SBT:**  Begin SBT as per for NON-Cardiac patients with PS based on ETT size, current FIO2 and current PEEP for 1 hour followed by SBT with PS = 0 for another 1 hour  If any checks above are **NO** (except for items with \*),do **NOT** begin SBT and discuss with ICU team. |

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| 1. **Monitoring Patient During SBT** | |
| If SBT not performed despite meeting screening criteria, indicate reason here: | |
| **SBT to be terminated immediately if patient displayed any of the following at any point during the SBT (place patient back on previous ventilator settings and inform ICU team):** | |
| Desaturation   * SpO2 < 92% in patients without congenital heart disease or patients with acyanotic heart defect * SpO2 decrease by > 5% from baseline in patients with cyanotic congenital heart disease | □ Yes □ No |
| RR increased above normal range | □ Yes □ No |
| Exhaled VT < 4 mL/kg | □ Yes □ No |
| Respiratory distress indicated by accessory muscle use, diaphoresis, nasal flaring | □ Yes □ No |
| Hemodynamic compromise   * HR ± 20% from baseline * BP ± 20% from baseline | □ Yes □ No |
| Patient went into apnea with ventilator backup ventilation | □ Yes □ No |
| ETCO2 > 55 mm Hg or increase by 10 mm Hg or by 20% from baseline | □ Yes □ No |

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| 1. **Post SBT** |
| If all above checks in section “2. Monitoring Patient During SBT” are **NO** at the end of 2 hoursof SBT,obtain blood gas. Inform ICU team of patient readiness for extubation, set time for extubation and decide on post-extubation respiratory support level.  Inform RN to hold feeds if not already done so. Ensure order to extubate is entered into patient’s electronic medical record before extubation can proceed. |

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| **If order to extubate not given, please document reason(s) in comments section and place patient back to previous ventilator settings**  □ Upcoming surgery or procedure (e.g. MRI) □ No provider to monitor extubation  □ Excessive suctioning □ ICU team preference □ Others: |

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| **Comments:** |