

J.T. Case Study

1. PH: 7.31, PaCo₂: 58, HCO₃: 28, PaO₂:54
 - a. These ABG's indicate that J.T. is in Respiratory acidosis
2. Assist control does all the work of breathing for the patient and gives a full volume of air. This was chosen because he is deteriorating quickly so this allows him to rest. Tidal volume is the volume of air delivered to the lungs with each breath so since he is very sick this was chosen because he will need more air to the lungs. The rate is at 14 breaths per minute because he needs to maintain good respirations. The FiO₂ is at a higher rate because it is delivering a specific amount of oxygen which he needs in order to get better. PEEP is the amount of pressure at the end of exhalation and the normal is 5 so they have it set at 5 in order to increase the pressure in the alveolar
3. J.T. needs more oxygen and the PEEP helps with this because it increases alveolar pressure and volume. Increasing the PEEP will give him more oxygen perfusion
4. Increase O₂ perfusion, check on the other VS, check emotional status because of depression
5. Oral care, skin care, BVM and suction
6. Soft restraints so they don't rip it out and remove objects that could be harmful
7. Ventilator required pneumonia, aspiration, barotrauma
8. Relaxation, decreases O₂ demand, comfort
9. Breathing spontaneously, supporting adequate oxygenation, maintaining normal hemodynamics
10. Decreased O₂ sat, increased or decreased respirations, respiratory distress, LOC changes, arrhythmias