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USIM > Department of Basic Simulation > Patient Care Room 1

- There is **Baby Patient Simulator** and **Pediatric Patient Simulator** in this room.
- In this room, many scenarios from newborn assessment and poor perfusion to pneumothorax and neonatal resuscitation can be simulated by simulating at least five clinical scenarios with Baby Patient Simulator and at least six clinical scenarios with Pediatric Patient Simulator. Techniques and procedures that can be applied on pediatric patients can be studied. In addition to ready-made scenarios, new scenarios can be created by trainers via the control computer.

Baby Patient Simulator (CAE Luna)

- It has spontaneous respiration. Bilateral and unilateral chest movements are observed. Normal and pathological lung sounds are present.
- Airway is realistic. Many airway procedures can be applied.
- It makes various breathing sounds. According to clinical status, it makes sounds like crying and grunting.
- Normal and pathological heart sounds can be auscultated. Pulses can be palpated. It has a monitor that shows vital signs. (3-lead ECG, invasive blood pressure, heat, NIBP, respiratory rate, heart rate, O2 saturation)
- Depressed, normal and bulging fontanel can be simulated.
- Normal and abnormal bowel sounds can be auscultated.

The activities that can be done with this simulator are:

- Nasotracheal/orotracheal intubation (ET tube), LMA insertion, oral and nasal pharyngeal airway insertion, bag-valve-mask ventilation, tracheostomy can be applied.
- Laryngospasm can be simulated.
- Esophagus or one of the main bronchi can be intubated, physical and metabolic changes occur.
- Blood pressure can be measured manually.
- Intramuscular and subcutaneous injection from bilateral thigh, intravenous intervention from 3 different regions (upper arm, foot, scalp), peripheral arterial, subclavian and umbilical catheterization, tibial intraosseous cannulation is available.
- Realistic real-time changes occur depending on the dose of the drugs and its pharmacokinetic, pharmacodynamic effects in the cardiovascular, neurological and pulmonary system.
- Urinary catheterization can be applied.
- Feeding tube can be attached.

Bursa Uludag University Faculty of Medicine Medicine Practices and Simulation Center

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USIM > Department of Basic Simulation > Patient Care Room 2

Pediatric Patient Simulator (CAE PediSIM)

- It has spontaneous respiration. Bilateral and unilateral chest movements are observed. Normal and pathological lung sounds are present.
- Airway is realistic. Many airway procedures can be applied.
- Pulses can be palpated bilaterally. Heart sounds can be auscultated.
- 3-lead ECG can be monitored. Vital signs of the simulator can be monitored. (ECG, NIBP, SpO₂, ETCO₂, invasive blood pressure, respiratory rate, heart rate and heat.)

The activities that can be done with this simulator are:

- Nasotracheal/orotracheal intubation, ET Tube, combi tube, LMA, bag-valve-mask ventilation, transtracheal jet ventilation, retrograde wire techniques, Sellick maneuver, gastric tube placement can be applied.
- Pneumothorax can be simulated and unilateral chest tube can be applied.
- Laryngospasm can be simulated.
- Blood pressure can be measured manually.
- CPR, defibrillation and cardioversion can be applied.
- Intravenous cannulation can be applied on the unilateral arm and forearm, and unilateral tibial intraosseous cannulation can be applied. Real-time pharmacological response is occurred according to drug administered and its dose.
- Urinary catheterization can be applied.