Rebecca Henrikson, RN

Becky is an ER nurse at The University of Kansas Health System Great Bend Campus. She graduated in 2014 with her RN from Barton Community College. Becky’s certifications include ACLS, BLS, NRP, PALS and TNCC. In her free time, Becky enjoys spending time with her husband and two children.
Michele Kraly, MSN, RN, CNP-T

Michele Kraly graduated with her BSN in 2010 from the University of Missouri, Kansas City. She went on to obtain her MSN in Nursing Administration from the University of Mary in Bismarck, North Dakota. She has been an employee of Children's Mercy Hospital since 2007 and a member of Children's Mercy Critical Care Transport Team since 2014.
Annette Webb, RRT-NPS, C-NPT

Annette Webb studied instrumental music at the University of Central Oklahoma. She achieved her Associate's Degree in Respiratory in 1998. She has been an employee of Children's Mercy Hospital for 22 years. She has been a member of Children's Mercy Critical Care Transport Team since 2000 and has completed over 6,000 transports.
Debbie Newton, MSN, RN, CCRN

Debbie has been a critical care nurse for 21 years. Starting in the PICU as a bedside nurse then ECMO nurse. She spent nearly 5 years as a travel nurse working in several PICU/CICU/NICUs across the country. In 2011, Debbie became the ECMO educator at Children's Mercy Hospital and then in 2014 became the ECMO department director developing an ECMO core team model. Debbie is also a wife and mother of 2 girls Audrey (11) and Emma (6).
Margaret Fogarty, BSN, RN

Maggie has been a critical care nurse in the NICU at Children's Mercy Hospital for 7 years. She serves on the Primary Nurse Committee and the Infant Loss Committee. She has presented nationally at the Society of Pediatric Nurses (SPN) conference on endotracheal tube placement. Maggie is still a newlywed. She married Declan in June of 2021!
Karishma Rao, MD

Dr. Karishma Rao is a clinical assistant professor within the Division of Neonatology at Children's Mercy, Kansas City. Her interests include NEC and BPD. It was during her Neonatology fellowship at Children's Mercy itself that she first developed an interest in neonatal pain and infant delirium. The concept of delirium in neonates is poorly understood at this time but she hopes to shed light on it as it gains some mainstream interest.
CASE PRESENTATION
TREATING THE UNKNOWN
BY:
BECKY HENRIKSON, RN
INTRODUCTION:

- I was the primary nurse caring for this patient.
- Priority was to address mother’s concern
- Patient arrived at 10:02 and discharged at 1600
- Concerns of respiratory distress or possible infection
PATIENT HISTORY/CHIEF COMPLAINT:

Patient was born approximately two weeks prior at 35 weeks gestation per Ballard score. Mother did not have any prenatal care and was unaware of pregnancy and in fact pregnant with twins. Mother states delivery was uncomplicated and patient had been doing well up until today. Has been eating normally until approximately 0100 this morning during his last feeding. Which he had 2 ounces of formula.
BALLAD SCORE: BALLARD MATURATIONAL ASSESSMENT, BALLARD SCORE, OR BALLARD SCALE IS A COMMONLY USED TECHNIQUE OF GESTATIONAL AGE ASSESSMENT.

Reference:
www.balladscore.com
INITIAL VITAL SIGNS:

- 10:02 am
- Blood Pressure: 59/23
- Heart Rate: 143 BPM
- Oxygen Saturation: 90% On Room Air
- Temperature: 89.3 Rectal
- Weight: 2.359 KG (5 LB 3.2 OZ)
ORDERS PLACED BY PROVIDER:

- 10:13 am
- CBC with differential
- CRP
- Sed Rate
- CMP
- POC Glucose
- Blood Cultures with sensitivity
- Urine
- Respiratory Viral Panel
- NS infusion
24 GAUGE IV WAS STARTED IN LEFT HAND AT 10:15 AM. GLUCOSE WAS 47.
VITALS:

- 11:20 am
- BP: 50/26
- Oxygen at 1.5 liter per nasal cannula
- Temp: 98.6°F (axillary)
• **D10 @8ML PER HOUR STARTED AT 10:29 AM AND GLUCOSE CAME UP TO 191.**
Lab Results:

- **WBC**: 30.9 (5.0-20.0)
- **HGB**: 11.2 (17.5-21.5)
- **HCT**: 30.0 (51-65%)
- **POTASSIUM**: 6.1 (3.5-5.1)
- **CO2**: 7 (20-28)
- **RESPIRATORY PANEL**: NEGATIVE
IV MEDICATION:

- Unasyn 110 mg at 7.3 ml per hour started at 10:34
VITAL SIGNS:

- 11:48 am
- BP: 50/26
- 93.0 F (rectal)
VITALS:

10:36 am

- BP: 59/23
- O2: 92% on 1 liter per nasal cannula
- Pulse: 165
- Resp: 30
- Temp: 96.4°F (rectal)
- Glucose: 168
IV MEDICATION:

- 12:05 pm - D10 infusion discontinued and normal saline started at 22 ml per hour.
CHEST X-RAY:

- Initial chest x-ray showed infiltrate present throughout lungs.
RESPIRATORY:

- 11:00 am - Respiratory was able to decrease oxygen to 1 liter per nasal cannula. Patient was also suctions with 5 French catheter and scant amount of thick yellow sputum was returned at this time.
VITAL SIGNS:

- 11:30 am
- BP: 50/22
- Temp: 98.6 F (axillary)
ADDITIONAL IV MEDICATION:

- 11:03 am Gentamycin 9 mg IV at 4.5 ml per hour
VITAL SIGNS:

- 12:44 pm
- Glucose: 163
- Temp: 99.1°F (rectal)
IV MEDICATION:

- 12:35 pm – Ampicillin 100 mg at 10 ml per hour started.
NURSING NOTE:

• **13:39** – VITALS
  • BP – 77/46
  • Pulse – 80
  • O2 Sat – 80
  • Temp – 97.8 F (rectal)
  • Patient successfully intubated with a 3.5 ET tube with positive colorimetric changes and equal breath sounds.

• **13:46** – Portable chest x-ray completed for tube placement. However, breath sounds are prominent on the right then the left.
• 13:20 - Oxygen saturation started to decrease into the 80’s. Patient was currently on 0.8 liters of oxygen. Respiratory at bedside. Provider notified at this time. Patient’s heart rate also started to decrease at this time as well.
NURSING NOTE:

- **13:28** – Avera Emergency activated
- CPR in progress at this time
- Respirations given by neo puff
- Blood glucose – 118
- **13:30** – Rhythm check
- CPR continued
- 0.3 ml of Epinephrine administered IV
- **13:33** – ROSC achieved but pulse was still weak, no respiratory effort observed, respirations are being provided by neo puff
- **13:34** – attempting to intubate but O2 saturation decreased to 68%, attempt stopped and ventilations provided by neo puff and O2 Sat's did increase 86% then up to 96%. Spontaneous respiratory effort observed.
### NORMAL VITAL SIGNS FOR INFANTS:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systolic blood pressure</td>
<td>67-84</td>
</tr>
<tr>
<td>Diastolic blood pressure</td>
<td>35-53</td>
</tr>
<tr>
<td>Heart Rate</td>
<td>100-165</td>
</tr>
<tr>
<td>Respirations</td>
<td>30-53</td>
</tr>
<tr>
<td>Temperature</td>
<td>36.6 – 38 C</td>
</tr>
</tbody>
</table>

Reference: www.pedscases.com
TRANSPORT
Follow-Up