

Intensive Care Nursery House Staff Manual

Cross-Covering the Well Baby Nursery and Pedi-Med Service

INTRODUCTION: This section of helpful tips was prepared with the help of past residents who suffered through cross-covering infants on the Well-Baby and Pedi-Med Service without the benefit of a readily available manual.

ATTENDING PHYSICIANS: The attendings for the Well Baby and Pedi-Med Service are your direct backup and should be called for questions about clinical management, complications, and for all admissions to the Special Care Nursery under the Pedi-Med Service. Remember to identify the on-call attending at evening sign-out rounds.

<u>Attending</u>	<u>Pager</u>	<u>Attending</u>	<u>Pager</u>
Jane Anderson	719-1884	Thomas Newman	719-1262
David Becker	719-6089	Marina Tan	719-8995
Jane Lee	719-5355	Alan Uba	719-2126
Carol Miller	719-3837		

CRITERIA FOR PLACING INFANTS ON THE VARIOUS SERVICES:

1. Well Baby Nursery (WBN) is intended for term and near-term infants who are sufficiently stable for rooming-in with their mothers. All infants admitted to the WBN must satisfy all of the following criteria:

- Gestation \geq 36 weeks
- Birth weight \geq 2200 grams
- No major congenital anomalies
- Temperature is stable without the need of an incubator or warmer
- No need for continuous electronic cardio-respiratory monitoring
- No need for intravenous lines, nasal/oral gastric tubes, or similar interventions

2. Pedi-Med Service: Infants who require more medical observation or treatment than the well babies. These infants should be placed in the High Observation Nursery or Special Care Nursery and must satisfy all of the following criteria:

- Gestation \geq 33 weeks
- Birth weight \geq 2200 grams
- No central vascular catheters
- No baby determined to be unstable
- No significant apnea or bradycardia
- No ventilator support
- No intravenous alimentation

Note: These criteria can be modified only by the **attending physician**. Infants who do not meet the criteria for either the Well Baby Nursery or the Pedi-Med Service are to be placed on the ICN Service.

BREASTFEEDING is to be encouraged. Our goal is to assure that all families who elect to breastfeed their infants will have a successful and satisfying experience. Please note the following:

- Infants are to be put to breast as soon after birth as feasible for both mother and infant, ideally within the first hour after birth.
- Breastfeeding mother-infant pairs are encouraged to room-in together on a 24h basis.
- Encourage the infant to nurse at least q2-3h for a minimum of 8 feedings per 24h.

- No supplementary water or milk is to be given unless ordered by a physician or nurse practitioner for medical indications.

Please refer to the document “Breastfeeding Well Newborns” in the **Well Baby Nursery Manual**, a black notebook kept in the WBN chart rack.

VITAMIN K₁ ADMINISTRATION: Every neonate should receive a single parenteral 0.5-1.0 mg dose of **vitamin K oxide** or phytonadione (AquaMEPHYTON™) within 1h of birth for prevention of vitamin K deficiency bleeding (Hemorrhagic Disease of the Newborn). Occasionally parents will refuse vitamin K or request oral administration. If you encounter this situation:

- Discuss this with parents. Try to use a non-confrontational tone. Be respectful and listen attentively to the parents’ reasoning and concerns. Provide honest answers and be sure to clarify the purpose of our recommendation. It is often helpful to describe vitamin K deficiency bleeding to parents. **Orally administered vitamin K has not been shown to be as effective** and puts infants at risk for late onset vitamin K deficiency bleeding which is associated with a higher incidence of intracranial hemorrhage.
- If parents persist in their refusal, they must sign the “Refusal to Permit Medical Treatment” form. These forms are kept in the file cabinet behind the unit clerk’s desk in the WBN.
- Circumcision will not be performed on any infant who has not received vitamin K by injection.

EYE PROPHYLAXIS against **gonococcal ophthalmia neonatorum** is mandatory for all neonates. A 1-2cm ribbon of sterile ophthalmic ointment containing 0.5% erythromycin should be administered within 1 hour of birth. Although California state law mandates neonatal eye prophylaxis, parents who refuse may sign a special waiver. This form is entitled “Refusal to Allow Treatment of Eyes of Infant with Prophylactic-Efficient Agent” and is located in the cabinet behind the unit clerk’s desk in the WBN.

HYPERBILIRUBINEMIA: Risk factors for non-physiologic **hyperbilirubinemia** include:

- Blood group or Rh incompatibility, especially if there is a positive Direct Antiglobulin Test (Coomb’s Test)
- Presence of excessive bruising or cephalohematoma
- Breastfeeding
- Excessive weight loss
- Gestational age < 37 weeks
- Maternal diabetes
- Polycythemia

Consider ordering a total serum bilirubin for jaundiced neonates with risk factors.

Start phototherapy as follows:

<u>Age(hours)</u>	<u>Total Bilirubin(mg/dL)</u>
<48	≥15
49-72	≥18
>72	≥20

Further testing to determine the etiology of hyperbilirubinemia should be individualized, taking into account the maternal/prenatal and family history, physical exam and general clinical setting.

HYPOGLYCEMIA: Risk factors for **hypoglycemia** include:

- SGA/IUGR with birth weight ≤ 2500 grams
- LGA (birth weight ≥ 4200 grams)
- Preterm (<36 weeks gestation)
- Post-term (≥ 42 weeks gestation)
- Infant of a diabetic mother or GIP (glucose intolerance of pregnancy)
- Polycythemia

An initial blood glucose level is checked on all neonates within 2 hours post delivery by the One-Touch Glucometer™ method. Neonates with any risk factor are monitored with repeated glucose levels at the following ages: ½ hour (insulin dependent mothers only), 1h, 2h, 4h, 6h, 9h, 12h, and 24h post delivery.

Treatment of hypoglycemia:

- If blood glucose is ≥ 40 mg/dL, no intervention or oral supplementation is needed.
- If blood glucose is **20-40 mg/dL:**
 - Recheck value. If still low, send blood sample to Clinical Laboratories STAT for glucose level.
 - Nipple feed immediately D5W, a minimum of 5-10 cc/kg.
 - Recheck blood glucose 20-30 min after nipple feed has been completed.
 - If low glucose level persists, repeat oral glucose supplementation and consider IV infusion (see below).
 - Continue to monitor blood glucose levels per above protocol.
- If blood glucose is **<20 mg/dL:**
 - Send blood sample to Clinical Laboratories for STAT glucose measurement.
 - Immediately nipple feed D5W at 10 cc/kg.
 - Recheck blood glucose 20 min after oral supplement. If blood glucose is still low transfer to SCN for intravenous infusion.
- Intravenous infusion for persistent hypoglycemia:
 - Give initial bolus of D10W IV at 2-4 cc/kg.
 - Continue IV infusion of D10W at 4-8 mg/kg/min.
 - Recheck blood glucose 20 min after starting infusion. If glucose is still low, consider increasing infusion by 2-4 mg/kg/min.
 - If infusion rate reaches >140 cc/kg/24h, increase glucose concentration to D12.5W.
 - Central line placement is required if D15W is necessary to maintain normal blood glucose level. If central line placement becomes necessary, transfer infant to Neonatology team.
- Do not use 25% or 50% glucose as IV treatment. These will raise blood glucose to very high levels and cause rebound hypoglycemia.

SEPSIS, HIV, AND HEPATITIS: Please refer to the sections on infectious diseases in this manual.

TOXICOLOGY SCREENING: Urine toxicology screen should be ordered under the following circumstances;

- Maternal history of illicit substance use or abuse of prescription medication.
- Mother has received ≤ 3 prenatal visits.
- Infant exhibits symptoms of exposure to drugs or alcohol. These include but are not limited to: high-pitched cry, difficult to console, hypertonicity, excessive stooling, sneezing, temperature instability, hyperphagia or poor feeding.

Maternal consent is not required to obtain a urine toxicology screen on an infant. However, it is our practice to inform the mother that the test has been ordered.

MANAGEMENT OF DRUG WITHDRAWAL SYNDROME: Treatment of infants exhibiting signs and symptoms of drug withdrawal should be tailored according to severity. Use of the Neonatal Abstinence Scoring Sheet is a helpful tool for measuring severity, monitoring progression and monitoring effect of treatment. Fifteen items are assigned a numerical score generally by the nursing staff once during each nursing shift.

- For total scores < 12 , non-drug interventions such as swaddling, placement in a quiet location with diminished lighting, and rhythmical motion such as a swing are often sufficient.
- For total scores ≥ 12 or greater, environmental measures may need to be augmented with medication such as Tincture of Opium (DTO), Phenobarbital or other sedatives. Infants housed in the WBN who require medications which may depress respiration should be transferred to the Special Care Nursery and placed on a cardio-respiratory monitor. (See section on Perinatal Substance Abuse, P. 172).

POLICE HOLD POLICY: A **Police Hold** is a process whereby the police place an infant or minor child in temporary protective custody of the Juvenile Court. It removes physical custody from the parents or guardians, and prevents the family from removing the child from the hospital without the express permission of Child Protective Services. While on a police hold, parents retain legal custody and may continue to consent to treatment and procedures. To initiate a police hold, contact the UCSF Police Department. Circumstances which necessitate a police hold include:

- A parent threatens to remove a baby against medical advice, and the discharge is medically unsound and/or life threatening.
- A parent is violent or is threatening violence.
- A parent is incapacitated by drugs or alcohol and the baby's immediate safety is in question.
- A parent is incapacitated by mental illness and the baby's immediate safety is in question.

Parents must be informed of the hold by the medical staff. A police hold does not necessarily prevent parents from visiting and participating in their infant's care. However the hospital has the right to set limits on visitation to ensure patient, staff and visitor safety. Nursing will ensure that all visits are supervised.

The entire **Police Hold Policy** can be found in the **Well Baby Nursery Manual**.

ADDITIONAL USEFUL TIPS FROM RESIDENTS:

“The most important thing to remember is that even though you are the ICN resident, these are not ICN babies. Most well babies require no [*invasive*] interventions.”

“If you write orders in the WBN, tell the nurses because they only run the charts once per shift.”

“If you are called to a delivery, please fill out the Newborn Assessment Part I. If for some reason you do not have time, at least fill out the section on peripartum and postpartum interventions.”

“Call the ICN charge nurse to advise her of Pedi-Med admissions.”