Preparing the Pediatric Patient for Rehab

in the critical care setting

Carly Andre MOT, OTR/L & Chelsea Sasaki, PT, DPT
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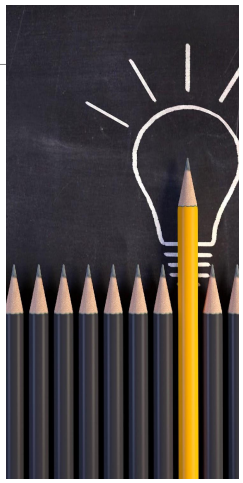
Objectives

- Promoting developmentally appropriate sensory stimuli, positioning, and mobility
- How to implement in routine cares
- Importance of caregiver engagement
- Long-term negative outcomes of poor positioning, immobility, inappropriate sensory experiences
- When to consult OT/PT?

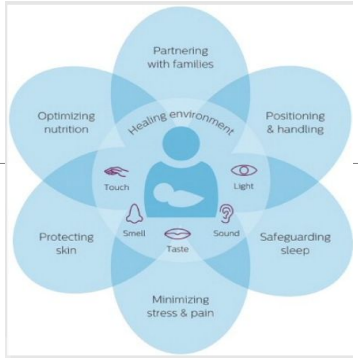


Activity

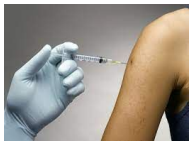
Defining Terms

- Early Rehabilitation
- Co-Occupation
- Family-Centered Care

Sensory Experiences



- Considering sensory experiences during routine cares
- Long-term impacts of sensory deprivation and sensory overload on nervous system
- Empowering caregivers to provide positive sensory input
- When do you call rehab?



Positioning

- Neutral Joint Alignment
  - special considerations for infants
- Variety of positions - supine, prone, sidelying, sitting, upright in tumbleform, caregiver arms, or on playmat
- When to call rehab?

Mobility

Blair R. L. Colwell, MD
Cydni N. Williams, MD
Serena P. Kelly, CPNP-AC
Laura M. Ibsen, MD

Mobilization Therapy in the Pediatric Intensive Care Unit: A Multidisciplinary Quality Improvement Initiative

American Journal of Critical Care (2018)

PICU Mobilization Protocol

	Severity of illness			
Age	1-Very unstable, active resuscitation	2-Somewhat unstable, PEEP>/=10, >10 dopamine or any epi/norepi	3-Stable, PEEP <10, FiO2<60%, stable dopamine <10	4-No invasive respiratory support, no inotropic support
0-12 months	Turn Gentle passive range of motion all 4 extremities and neck Alternate position of vent tubing	Add: Active ROM Use of bumper or nesting for supported flexion Supine, sidelying, and prone positioning, use of towel roll to support hip flexion	Add: Parent hold in chair, active positioning Up to chair/seat or swing	Add: Up to chair, seat, or swing 2-3 times per day Consider floor time Tummy time
1-4 years	Turn Gentle passive range of motion all 4 extremities and neck Alternate position of vent tubing Float heels	Add: Active ROM Supine, sidelying, and prone positioning, use of towel roll to support hip flexion Float heels Resting hand/foot splints if prolonged intubation	Add: Sitting edge of bed Sit in chair, tumble form chair Work towards twice daily ambulation Consider PT/OT consult for assistance	Add: Sit in chair Stand side of bed Stand side of bed Ambulate TID
>4 years	Turn Gentle passive range of motion all 4 extremities and neck Alternate position of vent tubing Float heels	Add: Active ROM Supine, sidelying, and prone positioning, use of towel roll to support hip flexion Float heels Resting hand/foot splints if prolonged intubation	Add: Sitting position (large tumble form chairs) Sitting edge of bed Sit in cardiac chair, active assist with transfer Work towards ambulation Consider PT/OT consult for assistance with mobilization	Add: Sit in chair Stand side of bed Ambulate TID Consider PT/OT consult for assistance with mobilization

For Long Stay, chronically critically ill patients (ie, ARDS), consider more active exercise when still in acute phase of illness, as tolerated—See Special Considerations

Mobility

- Identify baseline function & encourage return
- Cuddle, socialize, play! Encourage upright, weightbearing!
- When to call rehab?




Discussion

Let’s talk about your practices, questions, and brainstorm together!