Pharmacist Participation in Pediatric Medical Emergencies

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Disclosure

- I do not have a vested interest in or affiliation with any corporate organization offering financial support or grant monies for this continuing education activity, or any affiliation with an organization whose philosophy could potentially bias my presentation.

Objectives

- Pharmacist Objectives:
  - Describe the role of a pharmacist on a pediatric code blue response team
  - Discuss the appropriate dosing, preparation and administration of commonly used resuscitation medications in pediatric patients
  - Examine a formal multidisciplinary training program for members of a pediatric code blue response team

- Technician Objectives:
  - Describe the role of a code blue response team
  - List opportunities for pharmacy involvement in code blue response teams
  - State common pediatric medical emergency situations

Team Roles

- Medical Emergency Team roles
  - Physician team (1-2)
    - Intensivist, ED Physician, Hospitalist
  - Nursing team (3-5)
    - Recorder, medication, patient assessment, charge nurse/clinical leader, nursing supervisor
  - Respiratory team (2)
  - Pharmacy team (1-2)

- Code cart response locations
  - Main hospital, ACH bridges, OCC
  - 30 code carts

Pharmacist MET Participation

- Why should pharmacists participate in medical emergencies?
  - Drug knowledge
  - Pharmacy as part of the medical team
  - Ability to prepare medications and drips at the bedside
  - Access to medications not available on the code cart
  - Communication with pharmacy staff
  - Efficient bedside order entry
Pharmacist Expectations

- Pharmacy response 7:30am until 10pm daily
- Medication preparation including drips and boluses
- Drug calculation and double-check
- Procurement of medications and supplies
- Communication with central pharmacy
- Provision of drug information

Pharmacist Response

- Announce your arrival and obtain an identification sticker from recorder or nursing supervisor
- Retrieve the medication tray, find a place to work
- Locate the code sheet or verify weight and pull preprinted sheet from bottom of code cart
- Assess medication needs
  - Epinephrine (chest compressions)
  - Lorazepam (seizures)
- Closed loop communication
  - Repeat back requested medication
  - State the drug name and dose when handing off to medication nurse

Code Cart

- supply drawer
- medication tray
- IV fluids
- laminated code sheets

Code Cart Drug Tray

Code Cart Supplies

[Image of a code cart, medication tray, and code cart supplies]
**Code Blue Medications: Pediatric Considerations**

- Most pediatric patients will require a portion of a bristojet.
- Connectors and syringes of different sizes are required to dispense ordered doses.
- Labels are required prior to passing off for administration.
- Always use "closed loop communication".

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**Adenosine Preparation**

- Adenosine should be administered undiluted, as a rapid bolus IV over 1-2 seconds.
- Utilize IV site closest to patient's heart.
- Use smallest flush available.

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**Drug Dilution**

- Several medications used during pediatric resuscitations require dilution prior to administration.
  - Amiodarone
  - Procainamide
  - Dextrose 50%
  - Magnesium sulfate
  - Anticonvulsants

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**Medical Emergency Documentation**

- Nursing team leader will document events on the Emergency Response Record.
- Verify documented dose against calculated dose from code sheet.
- SIGN code sheet prior to departure.
- Bring used drug tray and cover back to main pharmacy.
- Debriefing.

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**Broselow Pediatric Resuscitation Tape**

- Color coded system for estimating weight.
- Proper equipment sizes.
- Precalculated medication dosages and infusion rates.
Trauma Room Set Up

MET Training

Medical Emergency Team Basics
0800 - 0815 Roles and Responsibilities
0815 - 0915 Scavenger Hunt
0915 - 0930 Break
0930 - 1115 Communication
1115 - 1145 Medications
1145 - 1215 Break
1215 - 1230 Documentation
1230 - 1300 Mock Code Simulation
RN: Only
1300 - 1345 HeartStart MRX
1345 - 1400 Intravenous Access

Simulation Labs

Control Room/OR Sim Lab

References