Pediatric Seizure

**History**
- Fever
- Prior history of seizures
- Seizure medications
- Reported seizure activity
- History of recent head trauma
- Congenital abnormality

**Signs and Symptoms**
- Observed seizure activity
- Altered mental status
- Hot, dry skin or elevated body temperature

**Differential**
- Fever
- Infection
- Head trauma
- Medication or Toxin
- Hypoxia or Respiratory failure
- Hypoglycemia
- Metabolic abnormality / acidosis
- Tumor

**Pearls**
- **Recommended Exam:** Mental Status, HEENT, Heart, Lungs, Extremities, Neuro
- **Items in Red Text** are key performance measures used to evaluate protocol compliance and care
- Addressing the ABCs and verifying blood glucose is more important than stopping the seizure
- Avoiding hypoxemia is extremely important
- **Status Epilepticus** is defined as two or more successive seizures without a period of consciousness or recovery. This is a true emergency requiring rapid airway control, treatment, and transport.
- Grand mal seizures (generalized) are associated with loss of consciousness, incontinence, and tongue trauma.
- Focal seizures (petit mal) effect only a part of the body and do not usually result in a loss of consciousness.
- Jacksonian seizures are seizures which start as a focal seizure and become generalized.
- Be prepared to assist ventilations especially if a benzodiazepine is used.
- If evidence or suspicion of trauma, spine should be immobilized.
- In an infant, a seizure may be the only evidence of a closed head injury.
- **Rectal Diazepam/Fentanyl/Lorazepam:** Draw drug dose up in a 3 ml syringe. Remove needle from syringe and attached syringe to an IV extension tube. Cut of the distal end of the extension tube leaving about 3 or 4 inches of length. Insert tube in rectum and inject drug. Flush extension tube with 3 ml of air and remove.

**Legend**

- **MR**
- **B** EMT B
- **I** EMT- I I
- **P** EMT- P P
- **M** Medical Control M

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**Universal Patient Care Protocol**

**Pediatric Airway Protocol**

**Actively Seizing**

- **Airway Protocol**
  - **IV Protocol**
    - Midazolam (Nasal/IM/IV/PR) or Lorazepam (IM/IV/PR) or Diazepam (IV/PR)
      - May Repeat X 1 after 5 min
    - **Blood Glucose**
      - If < 60
        - 10% Dextrose
        - Glucagon if no IV
      - Still Seizing?
        - **Notify Destination or Contact Medical Control**

- **Post-ictal**
  - **Assess Patient**
    - **Blood Glucose**
      - Glucose <60
        - **Evidence of Trauma?**
          - **Pediatric Head Injury Protocol**
            - **Obtain Temperature**
              - Seizure Recurs
                - Midazolam (Nasal/IM/IV/PR) or Lorazepam (IM/IV/PR) or Diazepam (IV/PR)
                  - May Repeat X 1 after 5 min
              - Blood Glucose
                - If > 60
                  - 10% Dextrose
                  - Glucagon if no IV
                  - Febrile
                  - **Cooling Measures**
                    - If Available
                      - Tylenol (if > 3 months of age)
                      - Ibuprofen (if > 6 months of age)
                    - **Notify Destination or Contact Medical Control**

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Any local EMS System changes to this document must follow the NC OEMS Protocol Change Policy and be approved by OEMS 2009