

**Title**

Evaluation of Efficacy and Accessibility of Short-term Usage of Clonazepam for Increased Seizures during Acute Illness

**Introduction**

Clonazepam is commonly utilized in the pediatric population in patients who present with seizures linked to an acute infection or illness. Data on dosing and efficacy is widely unstudied currently. Benzodiazepines are commonly utilized in seizure disorders as both maintenance and rescue therapy. Typical choices of drugs for this modality include nasal midazolam and rectal diazepam as rescue therapy with clobazam, clonazepam, and other benzodiazepines utilized for maintenance therapy.

**Methods**

A retrospective chart review was performed for patients seen at Cardinal Glennon Children's Hospital (CCGH) for patients prescribed clonazepam during acute illness between 2020-2021. Patient demographics that were obtained from charts include age, acute and chronic diagnoses, seizure type, gender, height, weight, in-patient and out-patient anti-epileptic medications, admission date, laboratory values, need for abortive seizure therapy, and days between discharge and prescription pick-up.

**Results**

91.7% of patients who were treated with clonazepam for febrile seizures did not have any further febrile seizures after beginning clonazepam therapy. 93.8% of patients were able to obtain their prescription within 24 hours of discharge. 6% of patients had insurance or availability issues at their chosen dispensing pharmacy. 82.5% of patients were also prescribed rectal diazepam at discharge or had a previous prescription for it.

**Conclusion**

Based on this data, clonazepam can be utilized to reduce seizure frequency in the setting of febrile seizures. Delays in therapy, regardless of dosage form, were minimal. However, the suspension formulation of clonazepam did have the most delays when filled at a pharmacy outside of the Cardinal Glennon Outpatient Pharmacy.