History of the Use of Low-dose Fenfluramine in Pediatric Epilepsy

**Fenfluramine and Epilepsy**

Dravet Syndrome

Approximately 75% of patients have genetic evidence of Dravet Syndrome.

The most common mutation is in the SCN1A gene, which encodes the Nav1.1 sodium channel.

Antiepileptic drugs (AEDs) with avoidance of specific sodium channel blockers are used.

Valproic acid and clobazam; stiripentol is not FDA approved.

- **60 mg/day Reduction in seizures:**
  - Improvement in seizure control was observed within 2-3 weeks of starting treatment.
  - Importantly, 5 of these patients were subsequently determined to have Dravet syndrome after the addition of fenfluramine to their treatment regimen.

- **90% reduction in ≥10 minutes seizures:**
  - In a retreatment study (Compassionate Use), 9 patients were retreated with fenfluramine. In this small exploratory and retrospective study, remarkably good results were observed. Patients who had previously responded to fenfluramine showed similar or enhanced response when retreated with fenfluramine.

- **No evidence of clinically important cardiac valve disease:**
  - In this small exploratory and retrospective study, no evidence of clinically important cardiac valve disease was found.

**Summary of Studies of Fenfluramine in Epilepsy**

- **1988:**

- **1996:**

- **2002:**

- **2012:**

REFERENCES


DISCLOSURES

No conflicts of interest reported.