Prescriptive Behavior and Perceived Efficacy of Stiripentol in a Dravet Syndrome Population in the US

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OBJECTIVE

This survey of US physicians treating individuals with Dravet syndrome was conducted to determine prescriptive behavior and perceived efficacy of stiripentol.

BACKGROUND

- Dravet syndrome is a rare, genetic, encephalopathy associated with developmental delays and multiple seizure types. Stiripentol is indicated for the treatment of seizures associated with Dravet syndrome in patients 2 years and older taking clobazam.
- The recommended target dose of stiripentol is 50 mg/kg/day. This survey of US physicians using stiripentol in Dravet syndrome summarize reported prescriptive behavior and perceived efficacy.

METHODS

- 52 physicians from 22 US centers, selected based on their experience treating patients with Dravet syndrome, were invited to complete an online survey between April and May 2020.
- 27 (52%) responded, reporting a total of 192 patients (mean of 7 patients per physician).
- Data collected included patient age group, starting dose, target dose, titration increment, titration interval, perceived percent seizure reduction, and any taper of concomitant antiepileptic drugs.

RESULTS

- The table lists reported typical starting and target doses for pediatric and adult patients.
- Most common stiripentol titration increment was 10 mg/kg/day (38.5%). 84.1% of physicians reported titration of stiripentol at 1-week intervals.
- Reduction of concomitant clobazam dose was reported by 73% of respondents with a reduction of 25% (n=11), 50% (n=3), or other (n=5).
- 58% of respondents reported reducing concomitant valproate dose by 15% (n=2), 30% (n=5), 50% (n=1) or other (n=3).

KEY FINDINGS

- 37% of physicians reported titrating stiripentol to at least the recommended target dose of
 50 mg/kg/day in their pediatric patients, 7.7% reported doing so in their adult patients.
 (Table)
- 81% of physicians reported at least 50% seizure reduction and 31% reported 75% seizure reduction with the use of stiripentol. (Figure)
- These US physicians are aware of the difference in pediatric versus adult stiripentol pharmacokinetics and of the usual adaptive dosing strategy for adult patients.
- The reported perceived efficacy is close to the data collected in the European pivotal, phase 3 trials and in patients in Japan.^{1,2}

TABLE. Average Stiripentol Dose (mg/kg/day)

| | PEDIATRIC | | ADULT | |
|------------------|---|------------|---|-----------|
| Dose (mg/kg/day) | Starting | Target | Starting | Target |
| <10 | 3 (11.1%) | | 1 (7.7%) | |
| 10 | 9 (33.3%) | | 3 (23.1%) | |
| 15 | 5 (18.5%) | | 1 (7.7%) | |
| 20 | 3 (11.1%) | 2 (7.4%) | | 2 (15.4%) |
| 25 | 1 (3.7%) | | 1 (7.7%) | |
| 30 | | 4 (14.8%) | | 1 (7.7%) |
| 40 | | 2 (7.4%) | | 2 (15.4%) |
| 50 | | 10 (37.0%) | | 1 (7.7%) |
| Other | 6 (22.2%) | 9 (33.3%) | 7 (53.8%) | 7 (53.8%) |
| | Dosing influenced by age, efficacy, and tolerability, in addition to weight | | Physicians indicated the use of fixed rather than weight-based dosing in adults | |
| | | | | |

FIGURE. Perceived Stiripentol Efficacy



