TOLERABILITY OF AN OVERNIGHT TRANSITION TO OXCARBAZEPINE FROM CARBAMAZEPINE

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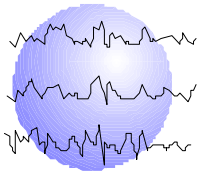

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REVISED ABSTRACT

RATIONALE: To avoid adverse effects (AEs) from a slow and complex gradual transition from carbamazepine (CBZ) to oxcarbazepine (OXC) for patients with inadequately controlled partial seizures or intolerable side effects, an overnight transition was designed.

METHODS: Twenty-five adult patients age 17-75 (16 female, 9 male) on CBZ monotherapy (n=13), dual AED therapy (n=9), or triple AED therapy (n=3) were transitioned off CBZ, stopping the medication with the last PM dose of day 1 and began OXC on day 2, continuing the same dose of OXC for at least a week, with all other AEDs unchanged, if present. Baseline seizure frequency ranged from 0 (1 patient with intolerable AEs) to 2-3 / week, mean = 4.48/mo. of SP, partial complex, or secondary generalized events. Baseline CBZ doses ranged from 200-1800mg/day; mean = 780mg/day, 16 patients were on extended release CBZ. Transition OXC doses ranged from 300-2400mg/day, mean = 1236mg/day, divided bid in 20 patients, tid in five. A transition calculation of 1.0-2.0 times current CBZ dose was utilized to obtain the OXC transition dose (mean = 1.58).

RESULTS: 25/25 patients tolerated the transition without discontinuing the drug. 20/25 experienced no transition side effects. One discontinued due to a clear drug rash two weeks after initiation of OXC, two felt "off balance", one felt clumsy and one experienced lethargy. All but the rash patient continued on the drug. 3/5 with AEs were on two or more other AEDs. Twenty-three of the patients had sodium values available after transition; two were <125 mEq/L, but ≥120 mEq/L. They were both asymptomatic and the drug was continued. No serious seizure exacerbation was experienced during transition.

CONCLUSION: An overnight transition from carbamazepine to oxcarbazepine can be effected safely with minimal adverse effects.

INTRODUCTION

People with epilepsy who transition to a new medication while tapering and discontinuing an existing one, may experience side effects along with an increase in seizure activity. This transition may take days or even weeks to accomplish. Some patients are admitted to the hospital to achieve this in a safe environment.

We implemented an outpatient overnight transition going from carbamazepine (CBZ) to oxcarbazepine (OXC) in an attempt to avoid adverse effects and intolerable side effects that can happen with slower transition programs. This report summarizes those results.

METHODS

Twenty-five adult patients age 17-75 (16 female, 9 male) on CBZ monotherapy (n=13), dual AED therapy (n=9), triple AED therapy (n=3) were transitioned off CBZ, stopping the medication with the last PM dose of day 1 and began OXC on day 2, continuing the same dose of OXC for at least a week, with all other AEDs, if present, unchanged. Baseline seizure frequency ranged from 0 (1 patient with intolerable AEs) to 2-3/week, mean = 4.48/mo. of simple complex, partial complex, or secondary generalized events. Baseline CBZ doses ranged from 200-1800mg/day; mean = 780mg/day; 16 patients were on extended release CBZ. Transition OXC doses ranged from 300-2400mg/day, mean = 1236mg/day, divided bid in 20 patients, tid in five. A transition calculation of 1.0-2.0 times current CBZ dose was utilized to obtain the OXC transition dose (mean = 1.58)[1].

RESULTS

Twenty-five of twenty-five patients tolerated the transition without discontinuing the drug. Twenty (80%) experienced no transition side effects. One (4%) discontinued due to a clear drug rash two weeks after initiation of OXC. Two (8%) felt “off balance”, one was clumsy, while one experienced lethargy. All but the rash patient continued on the drug (Figure 1). Three (60%) of the patients with adverse effects were on two or more AEDs. Twenty-three of the patients had sodium values available after transition; two were less than 125 mEq/L, but greater than or equal to 120 mEq/L (Table 1). They were both asymptomatic and the drug was continued. No serious seizure exacerbation was experienced during transition.

DISCUSSION

In our study there were no increases in seizure activity during the transition.

The transition dose of OXC does not seem to effect adverse reactions.

Isojarvi[2] et al, found low serum sodium concentrations appear to be more common during OXC therapy than CBZ. Also, CBZ, or OXC hyponatremia, appears to be asymptomatic in most cases. However, a significant decrease in serum sodium levels may result in drowsiness, mental confusion, dizziness and headaches, prompting discontinuation of medication. In our sample the patients with low sodium had no side effects.

CONCLUSION

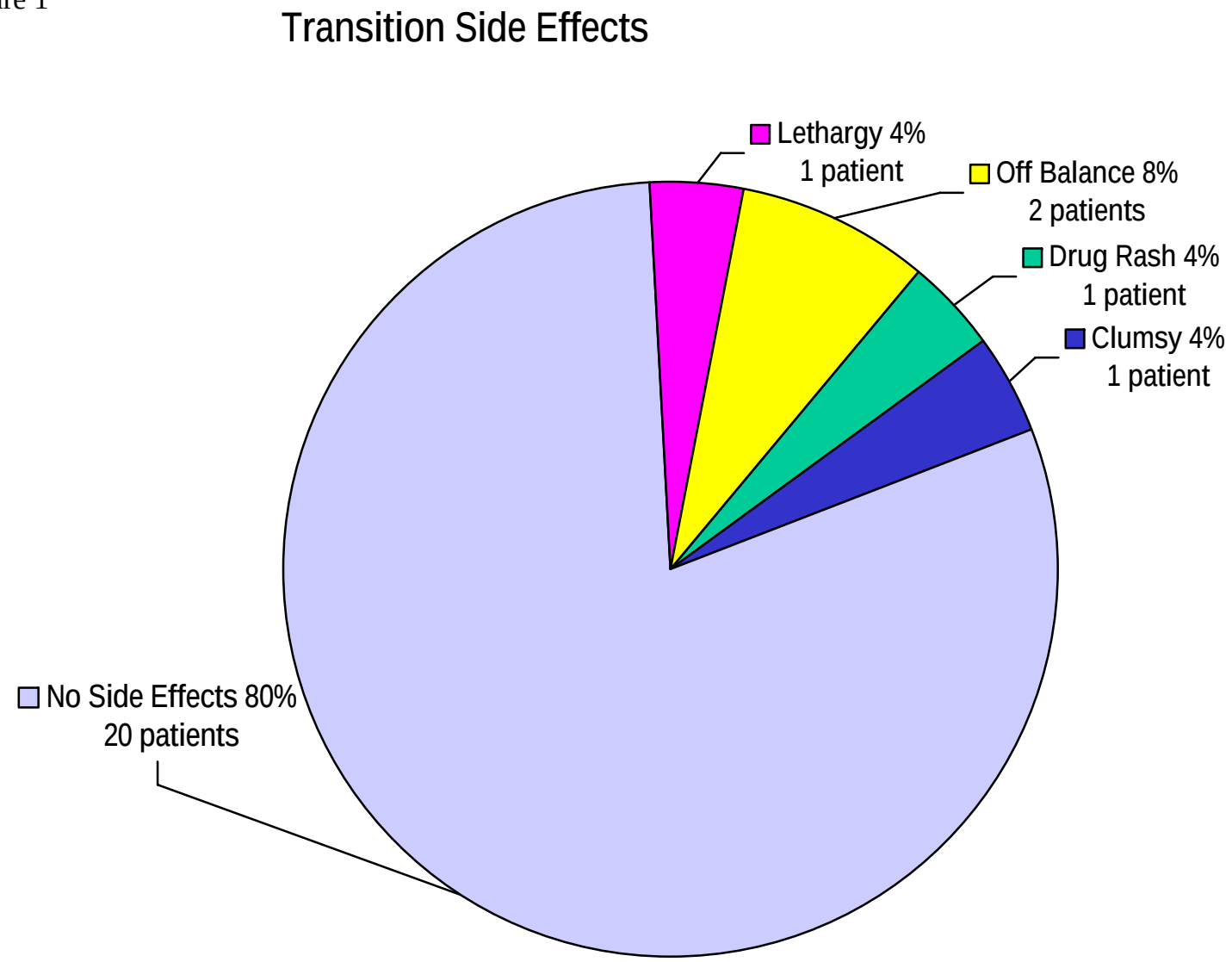
An overnight transition from carbamazepine to oxcarbazepine can be achieved safely with minimal adverse effects.

REFERENCES

1. Sachdeo R, Beydoun A, Schacter S, Vasquez B, Schaul N, Mesenbrink P, Kramer L, D'Souza J. Oxcarbazepine as monotherapy in patients with partial seizures. Presented at 54th Annual Meeting of the American Epilepsy Society, Los Angeles, CA December 1 – 6, 2000.

2. Isojarvi J, Huuskonen U, Pakarinen A, Vuolteenaho O, Myllyla V. The regulation of serum sodium after replacing carbamazepine with oxcarbazepine. *Epilepsia* 2001; 42(6); 741-745.

Figure 1


Transition Side Effects
Lethargy 4%
1 patient
Off Balance 8%
2 patients
Drug Rash 4%
1 patient
Clumsy 4%
1 patient
No Side Effects 80%
20 patients