

I.V. Methylprednisolone plus Diazepam in Medication Overuse Headache



M. Paolucci, R. Altavilla, G. Gambale, C. Altamura, F. Vernieri
 Centro Cefalee, Policlinico Universitario Campus Bio-Medico di Roma,
 Rome, Italy

BACKGROUND

Medication overuse headache (MOH) is a secondary chronic headache occurring on 15 or more days per month and developing as a consequence of regular overuse of acute or symptomatic headache medications (10-15 or more days per month) for more than 3 months. It usually, but not invariably, resolves after the overuse is stopped (1).

Benefit of acute withdrawal of the overused medication has been shown in some studies (2, 3, 4); performing a transitional therapy ("bridge therapy") during the days of withdrawal may ensure symptomatic relief from rebound headache and avoid withdrawal symptoms.

One of the most chosen approach involves the use of corticosteroids: most studies in literature focused on the use of prednisone per os (5, 6, 7), and there seems no benefit from taking steroids. Less data are available for the use of methylprednisolone ev, but it seems to have a protective role from headache episodes occurring during wash-out treatment (8, 9).

This retrospective study aims to evaluate the effectiveness of detoxification protocol used by our department, that consists in interruption of the abused drug and the endovenous administration of methylprednisolone 125 mg plus diazepam 10 mg and esomeprazole 40 mg for 5 consecutive days; depending on patient's characteristics, prophylactic therapy for chronic headache is modified or started by the end of the wash-out

METHODS

We searched for all patients with MOH that underwent wash-out between august 2010 and december 2014 for whom follow-up data were available. We then compared these patients with a control group formed by patients with MOH that did not undergo to detoxification protocol, but only changed prophylactic therapy.

We looked for differences in mean monthly days of headache and, if any, in the percentage of patients sensitive ("responders"; "high responders" if reduction > 50%) to these types of treatment.

DISCUSSION

Our results showed that the performed protocol was effective and well tolerated in patients with MOH. Comparing patients that underwent to the detoxification protocol with patients that only changed prophylactic therapy, we found a significant difference in the reduction of median days of headache, in the percentage of patients that respond to therapy and in the percentage of high responders patients (patients that reported a >50% reduction in in monthly days of headache) at one month after the treatment. The differences between the groups attenuate after the first month.

This retrospective study shows that a detoxification protocol with methylprednisolone and diazepam ev is a widely effective therapeutic strategy ensuring an adequate reduction of headaches in patients with MOH.

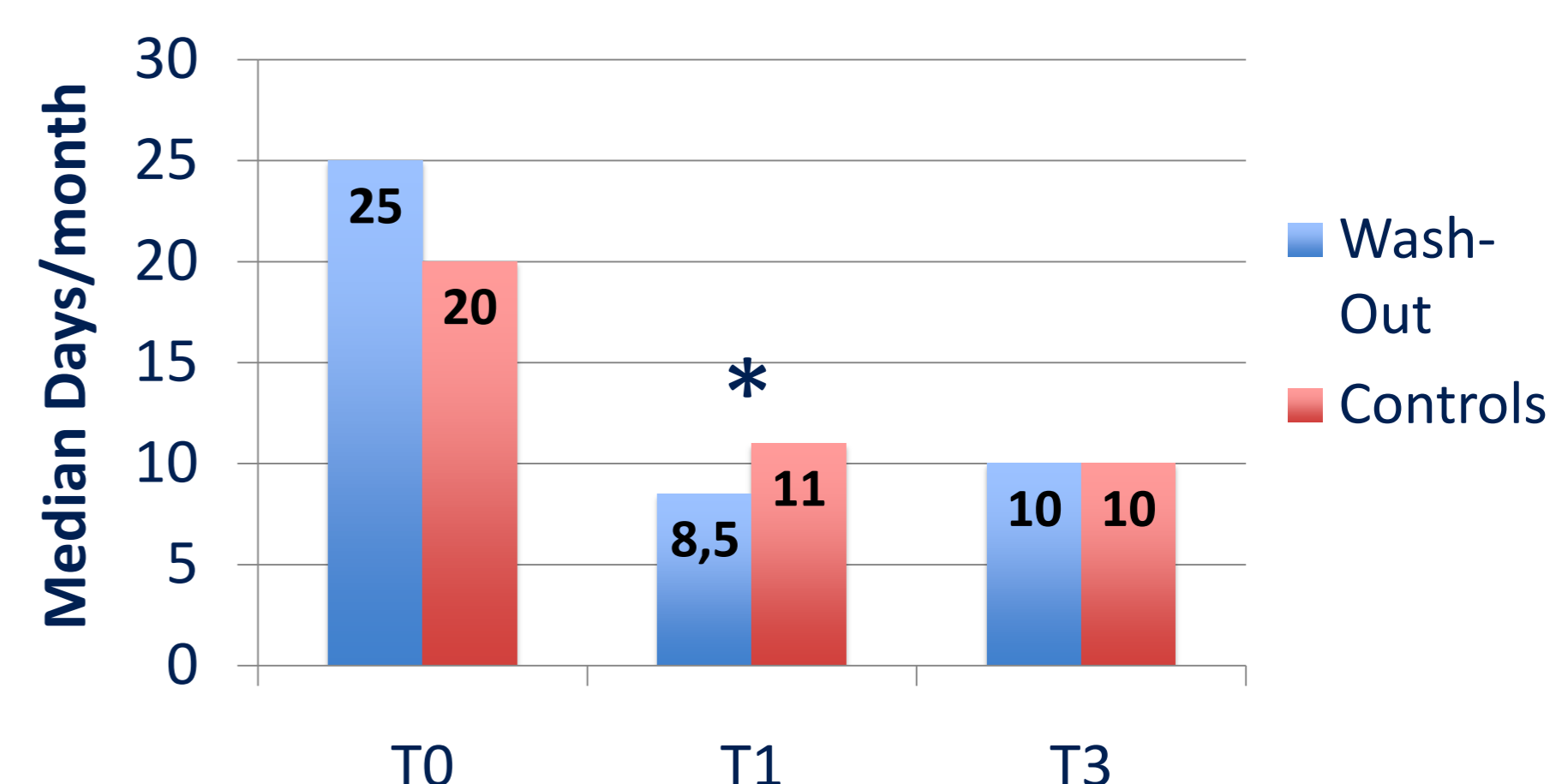
RESULTS

Wash-out group: 34 patients (for a total of 40 treatments), with a one-month follow up control available (T1); for 25 of this patients (for a total of 29 treatments) is available a 3-months follow-up control examination (T3). All patients completed the treatment without showing side effects.

Control group: 21 patients, with a one-month follow up control available (T1); for 18 of this patients is available a 3-months follow-up control examination (T3)

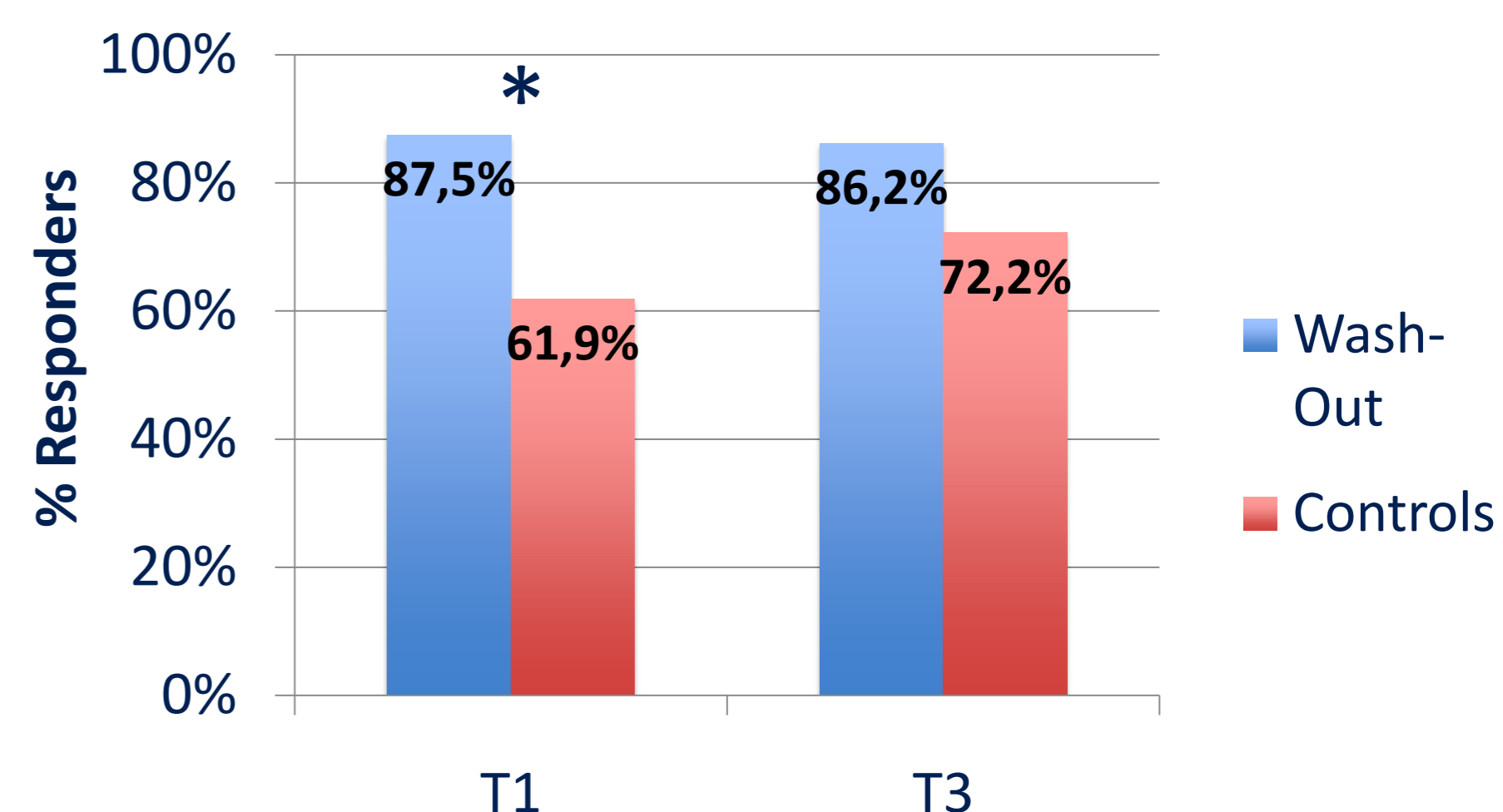
Median monthly days of headache

- Wash-out group: 66% reduction from T0 to T1; 60% reduction from T0 to T3;
- Control group: 45% reduction from T0 to T1; 50% reduction from T0 to T3;
- Mann-Whitney U-test showed a statically significant difference between the averages of the two groups at T1 ($p=0,034$), but not at T3 ($p=0,2$)



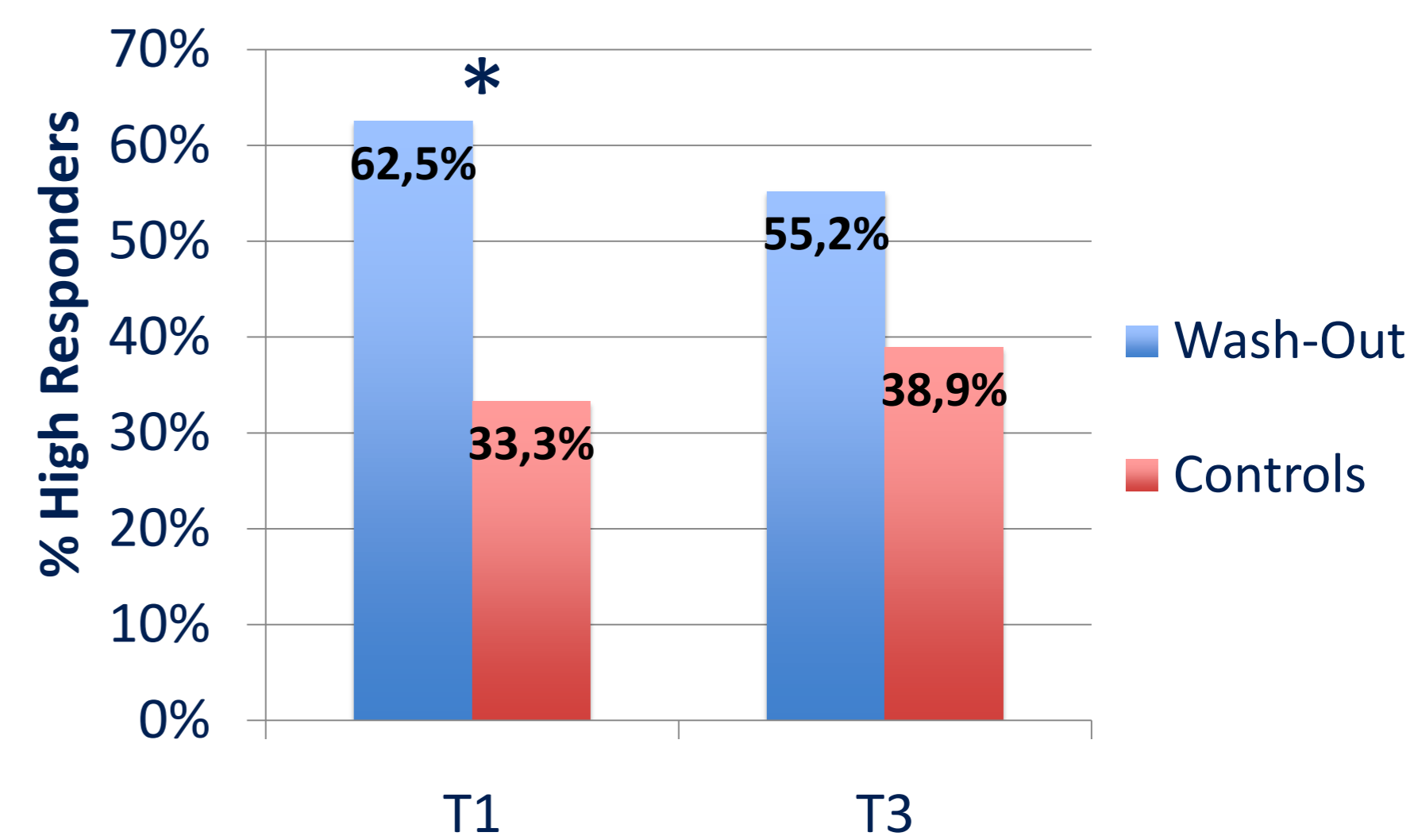
Percentage of Responders

- Wash-out group: 35 responders on 40 treated at T1; 25 responders on 29 treated at T3
- Control group: 13 responders on 21 subjects at T1; 13 responders on 18 subjects at T3
- Fisher's test showed a statically significant difference between the percentages of the two groups at T1 ($p=0,04$), but not at T3 ($p=0,27$)



Percentage of High Responders

- Wash-out group: 25 high resp. on 40 treated at T1; 16 high resp. on 29 treated at T3
- Control group: 7 high resp. on 21 subjects at T1; 7 high resp. on 18 subjects at T3
- Fisher's test showed a statically significant difference between the percentages of the two groups at T1 ($p=0,036$), but not at T3 ($p=0,37$)



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