
Symposium

[S-18] S-18: TDM for cardiovascular and endocrine diseases

Chairs: Hirotochi Echizen, Japan / Naoki Matsumoto, Japan

Wed. Sep 27, 2017 10:30 AM - 12:00 PM Room E (1F)

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[S-18-2] Role of TDM and psychological profile assessment in treatment-resistant hypertensive patients

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Background

Recent studies using drug monitoring suggest that a high proportion of patients with apparently treatment-resistant hypertension (aTRH) are in fact poorly or non-adherent. However, in most cases, antihypertensive treatment was not standardized, and predictive factors of poor adherence were not analyzed. The aim of this work was to assess adherence in patients with aTRH on a standardized treatment, and to identify predictive factors of poor adherence, including psychological profile.

Methods

All patients with confirmed aTRH on a standardized antihypertensive treatment including Olmesartan, Amlodipine, Hydrochlorothiazide and Spironolactone were eligible. Drug adherence was assessed by the Morisky Medication Adherence Scale (MMAS-8) and drug dosages in urine using Liquid Chromatography-Mass Spectrometry (LC-MS/MS). Psychological profile was assessed by the Toronto Alexithymia Scale (TAS 20), the Brief Symptom Inventory (BSI) the Multidimensional Experiential Avoidance Questionnaire (MEAQ) and the Post Traumatic Diagnostic Scale (PDS).

Results

The analysis included 35 consecutive patients with aTRH (mean age: 51 years, 54% females, mean office blood pressure: 180/105 mmHg, 24-hour ambulatory blood pressure: 160/100 mmHg). The proportion of adherent, partially adherent and totally non-adherent patients was 12%, 27%, 61% using MMAS-8, and 29%, 40%, 31% using LC-MS/MS. The sensitivity and specificity of MMAS-8 vs. LC-MS/MS was 75% and 76%, respectively. Patients labelled as adherent, partially adherent and totally non-adherent according to LC-MS/MS differed by the proportion of women (30, 43 and 82%, $p=0.042$), and the total number of drugs per day (6.4, 6.2 and 10.2, $p=0.041$). Furthermore, poorly adherent patients were characterized by more alexithymia (TAS2, $p=0.043$), somatisation ($p=0.004$), repression-denial ($p=0.021$), and history of traumatic events ($p=0.011$). Finally, poorly adherent patients tended to have a lower education level and were more frequently living without a partner.

Conclusions

Over 70% of patients with aTRH were found to be poorly or non-adherent by LC-MS/MS. Poor adherence was associated with female gender, total number of drugs prescribed and psychological characteristics. The reliability of the Morisky Adherence Scale was limited. Assessment of adherence by drug monitoring in body fluids and psychological evaluation should be considered in all patients with aTRH.

