**Patient characteristics**

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| --- | --- | --- | --- |
| **Parameter** | **Clinical case 1** | **Clinical case 2** | **Clinical case 3** |
| **Diagnosis** | **MSA-C clinically established** | **MSA-P clinically established** | **MSA clinically probable** |
| Age at the onset / duration of the disease, years | 54/2 | 61/3 | 60/3 |
| Initial diagnosis | Cerebellar ataxia. Chronic prostatitis | Vertebral osteochondrosis. Parkinson's disease. Benign prostatic hyperplasia | Orthostatic hypotension |
| REM-sleep behaviour disorder | + | + | + |
| Akinetic rigid syndrome | + | +++ | + |
| Cerebellar ataxia syndrome | +++ | ++ | + |
| Pyramidal syndrome | ++ | – | + |
| Degree of orthostatic hypotension (SBP/DBP, mm Hg) | 40/0 | 50/20 | 60/30 |
| Post-void residual volume, mL | 105 | 51 | 100 |
| MRI abnormalities | Signs of the pons and cerebellar atrophy, the hot cross bun sign | Hyperintensive putamen, signs of the pons and cerebellar atrophy | No abnormalities |

DBP, diastolic blood pressure; MRI, magnetic resonance imaging; MSA, multiple system atrophy; MSA-C, MSA, the cerebellar subtype; MSA-P, MSA, the parkinsonic subtype; REM, rapid eye movements; SBP, systolic blood pressure