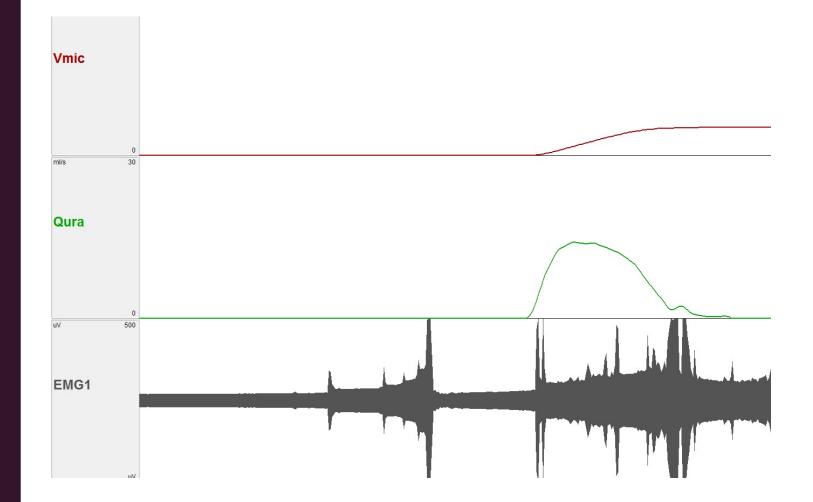


Yazidi M, Dades R, Kabil A, Boutalja H, Kyal N, Lmidmani F, El Fatimi A University Hospital Ibn Rochd of Casablanca, PMR Department

Hypothesis / aims of study

Multisystem atrophy (MSA) is a neurodegenerative disorder that is part of the parkinsonian syndromes, characterised by a progressive course and a severe prognosis. It is suspected when there is a variable combination of dysautonomia (orthostatic hypotension, genitourinary disorders), associated with a parkinsonian syndrome of low dopa-sensitivity and/or a cerebellar syndrome. Diagnosis is largely based on urodynamic investigation of vesicosphincter disorders



Study design, materials and methods

We conducted a retrospective study in our department over the period January 2020-December 2023, including 14 patients followed for probable MSA. The aim was to assess the profile of DVT in this population.

Results and interpretation

14 patients followed for urinary disorders related to MSA. Four women and 10 men with a mean age of 67.5 years (59 - 76 years). Urinary symptoms were dominated by obstructive signs in 8 cases (57%), recurrent urinary tract infections in 4 cases (26%), irritative signs in 4 cases (28%) and urinary incontinence in 3 cases (21%). Urinary handicap assessed by MHU (measure of urinary handicap) averaged 8.7. Urodynamics revealed detrusor hyperactivity in 28% of patients, associated with low bladder compliance in 14% and vesico-sphincter dyssynergia in 36%, and a significant post-void residual in 57% of cases. Depending on the case, management was based on appropriate drug therapy: anticholinergic in 3 cases, beta-3 adrenergic in 2 cases, alpha blocker in 5 cases, non-pharmacological treatment in the form of biofeedback perineal reeducation in 8 patients, and transcutaneous neurostimulation of the tibial nerve in 8 cases.

AMS is considered to be one of the main causes of atypical parkinsonian syndrome. Diagnostic criteria are essentially clinical, and the predominance of one of the two syndromes, parkinsonian or cerebellar, makes it possible to classify them into two clinical forms: AMS-P and AMS-C. The definitive diagnosis is based on postmortem anatomopathological confirmation of the brain, revealing oligodendroglial intracytoplasmic inclusions with a high density in the regions belonging to the olivo-ponto-cerebellar system and the nigrostriatal pathway. The prevalence of AMS is low, estimated at between 1.6 and 5 cases per 100,000 population. Its prognosis is more severe than that of idiopathic Parkinson's disease (IPD), with a median survival of around 6 to 9 years.

The early onset of urinary dysfunction is a clinical criterion in favour of MSA. They occur significantly earlier in MSA than in IPD. The clinical signs are marked by the frequency of obstructive signs rather than irritative signs, associated with impotence in men on an almost constant basis

Conclusions

The detailed analysis of vesicosphincter disorders is extremely useful in orienting the neurological diagnosis between IPD and MSA. However, it should be remembered that these are clusters of arguments, with no specific criteria for MSA. Urodynamic investigation helps to clarify the profile of TVS and thus to propose appropriate management with a view to improving these patients' quality of life.

References

- 1 M.P.Le bot-Le borgne et al :Examen urodynamique et pathologies extra pyramidales étude a propos de 52 patients:Ann Réadaptation Md Phys 2000 ; 43 : 7X-83
- 2 An update on multiple system atrophy Iva Stankovic 1, Mechteld Kuijpers, Horacio Kaufmann Curr Opin Neurol. 2024 Aug 1;37(4):400-408
- 3 Improving diagnostic accuracy of multiple system atrophy: a clinicopathological study Yasuo Miki, Sandrine C Foti, Yasmine T Asi. Brain 2019 Sep 1;142(9):2813-2827.