

Bladder Dysfunction and Disability in Persons Newly Diagnosed with Multiple Sclerosis

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BACKGROUND

Neurogenic bladder occurs in 80% of persons diagnosed with MS causing repeated Urinary tract infections and possibly leading to progressive neurological impairments. Urinary urgency, incontinence, nocturia and urinary hesitancy are some issues associated with incoordination of the sphincter and urethra as well as disrupted transmission of electrical impulses that involve emptying the bladder. UTI's have been associated with increase in cytokines and interferon production causing inflammation and leading to increase in disability from relapse thus causing concern for the newly diagnosed individual.

OBJECTIVES

To determine incidence of bladder dysfunction in persons diagnosed with MS within one year, and to assess the correlation between disability and bladder dysfunction. To affirm the necessity of frequent bladder evaluation, even in newly diagnosed, to avoid UTIs and provide management in the early stages of dysfunction.

METHOD

Persons with MS diagnosed within one year time frame participated in measurement of walking speed with the Timed 25ft Walk (T25'W) and post void residual (PVR) measured through a bladder ultrasound. T25'W values were considered normal at 2.2 seconds and PVR values of 1ml- 49ml.

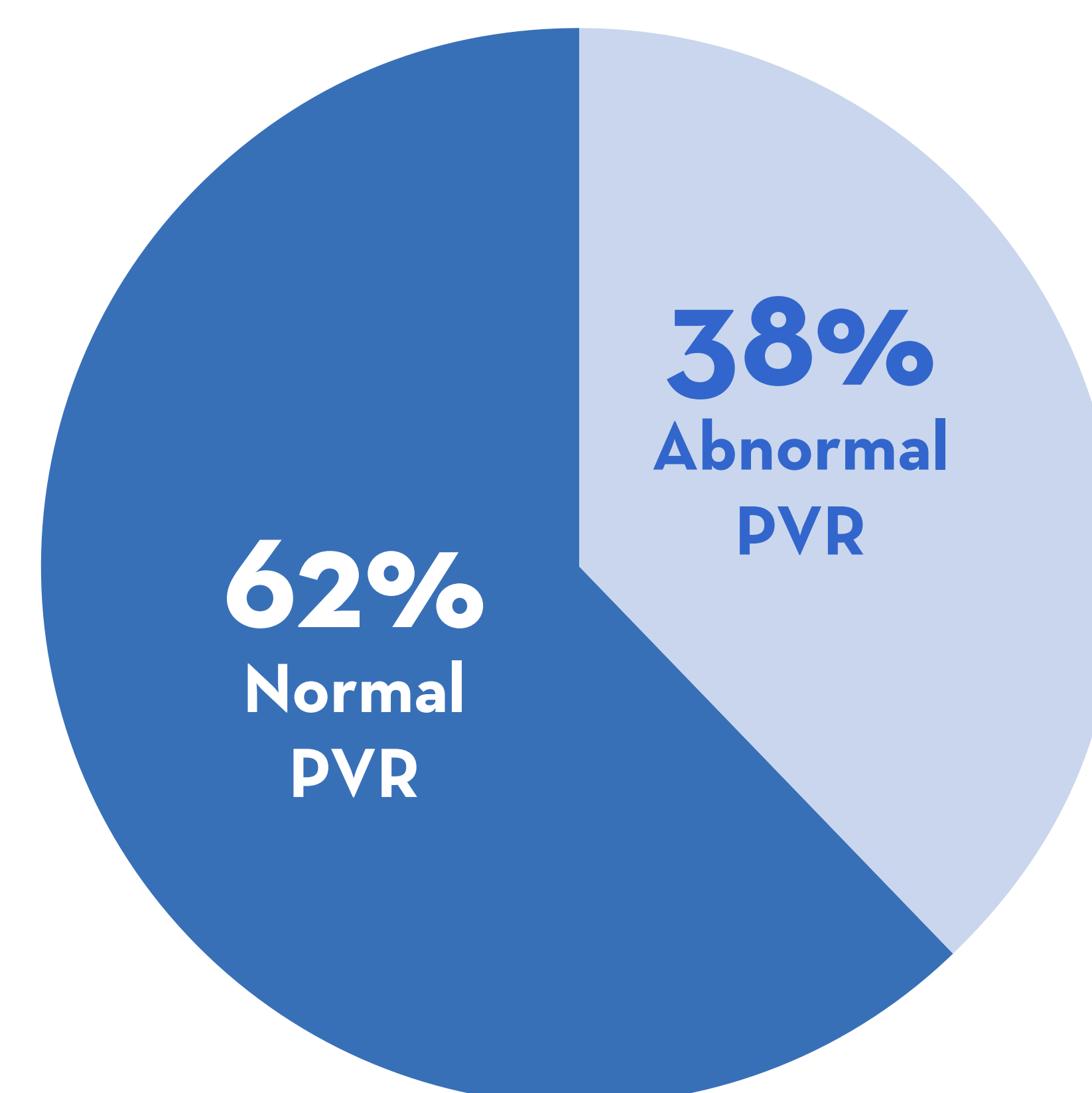
RESULTS

34 newly diagnosed persons were studied. 13 persons (38%) presented with abnormal PVR and all 13 subjects presented with slowed walking speeds compared to norm. 4 subjects out of 13 performed the T25'W requiring more than 5 seconds indicating significant impairment, while 9 participants were under 5 seconds indicating minimal impairment of MS on ambulation. PVR ranged from 67ml to 300ml and T25'W scores ranged from 3.6 seconds to 6.8 seconds.

CONCLUSION

38% of persons newly diagnosed presented with neurogenic bladder with high risk of UTI. Abnormal PVR correlated with decreased walking speed in all (100%) of these newly diagnosed individuals with significant impairment in four (30%). These findings necessitate early detection and intervention of bladder dysfunction to lessen occurrence of further disability.

NEWLY DIAGNOSED



NEWLY DIAGNOSED WITH ABNORMAL PVR

