



POSTER PRESENTATION

Open Access

Using the 6 minute walk to investigate endurance in patients with HTLV associated myelopathy

A Adonis^{1*}, G Taylor^{1,2}

From 16th International Conference on Human Retroviruses: HTLV and Related Viruses
Montreal, Canada. 26-30 June 2013

Patients with HTLV-Associated-Myelopathy (pwHAM) predominantly have proximal leg weakness, and reduced activities of daily living (ADLs). 92% of pwHAM attending NCHR use a walking aid and experience difficulty with walking long distances, thus many are housebound, or community ambulators. The 6 minute walk test (6MWT) measures walking endurance and was measured at 2 timepoints (T1 & T2), 1 year(yr) apart. We retrospectively analysed 36 patients' notes (26♀: 10♂; mean age 56.8yrs; mean duration of HAM 10.7yrs). We correlated, regressed and t-tested 10m timed walk (10mTW), walking aid used, pain scores, distance covered, time taken and velocity. Significant differences were found between T1&T2 for: 6MWTTime $p=0.02$; 6MWTVelocity $p=0.04$ & 10mTW $p=0.04$. 6MW is reliable (ICC: 0.83).10mTW inversely correlated with the 6MWTDistance covered T1 $p=0.002$ & T2 $p=0.022$ & 6MWTVelocity T1 $p=0.000$ & T2 $p=0.002$.10mTW at T1 predicted 6MWTDistance covered ($p=0.004$), T1 6MWTVelocity predicted T2 distance walked. Walking aids predicted 10mTW time ($p=0.00$ at T1 & T2); 6 MWTDistance covered (T1= $p=0.002$;T2: $p=0.00$) and velocity (T1&T2: $p=0.00$). Duration of disease ($p=0.34$), interval between tests ($p=0.57$) & age ($p=0.75$) did not predict the 6 MWT (distance or time) or the 10mTW. Average pain score changed 8.3% between T1&T2 ($p=0.75$). No element of the 6 MW test or the 10mTW correlated with pain at either time point. Walking endurance is an important component of walking capacity. The 6MWT appears to be a reliable measure to use in patients with HAM. The results demonstrate that pwHAM are more dependent in

their ADLs, are a falls risk, walk limited distances & have limited endurance.

Authors' details

¹National Centre For Human Retrovirology (NCHR), St Mary's Hospital, Imperial College Healthcare NHS Trust, London, UK. ²Imperial College London, London, UK.

Published: 7 January 2014

doi:10.1186/1742-4690-11-S1-P20

Cite this article as: Adonis and Taylor: Using the 6 minute walk to investigate endurance in patients with HTLV associated myelopathy. *Retrovirology* 2014 **11**(Suppl 1):P20.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



* Correspondence: adine.adonis@imperial.nhs.uk

¹National Centre For Human Retrovirology (NCHR), St Mary's Hospital, Imperial College Healthcare NHS Trust, London, UK

Full list of author information is available at the end of the article

