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HOW GOOD IS CLINICAL EXAMINATION IN THE ASSESSMENT OF VOLUME STATUS IN PD PATIENTS?

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Clinical assessment of a PD patient's volume status is of critical importance, but has not been studied extensively. We evaluated 18 stable, established PD patients with a structured clinical examination. This exam included 9 history and 10 physical exam items along with an overall summary assessment. We compared this with two objective measures of extracellular fluid volume: bioimpedance analysis (**BIA, Quadscan 4000, BodyStat**), and N terminal B-type natriuretic propeptide (N-BNP, Roche Diagnostics). **BIA has reasonable correlation with dilutional measures of fluid in dialysis patients**. BNP has not been studied extensively in PD patients. Clinical assessment was carried out independently by 2 physicians who were blinded to BIA and BNP results.

N-BNP did not correlate well with BIA measures of extracellular water (ECW) ($r=0.125$, $p=0.62$). N-BNP did correlate with systolic BP ($r=0.523$, $p=0.04$). **Overall clinical volume assessment correlated with ECW ($r=0.564$, $p=0.015$) and total body water (TBW) ($r=0.478$, $p=0.045$) measured by BIA**. The overall history correlated better than the overall physical examination score. Of the specific items assessed, a history of weight gain ($r=0.635$, $p=0.005$) and CVP ($r=0.749$, $p<0.001$) showed the highest correlation with BIA ECW. Interestingly, patient's self assessment of volume status was even better than the overall physician assessment in predicting BIA measured ECW ($r=0.689$, $p=0.003$).

Clinical examination correlates with BIA assessment of volume status and remains a useful tool in the evaluation of PD patients. N-BNP did not correlate with BIA. **Patient's self assessment strongly correlated with BIA.**