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| **Activity behaviours in patients with malignant pleural effusion: relationship with quality of life.** |
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| **Introduction/Aim:** Malignant pleural effusion (MPE) complicates most cancers. Accelerometry has been used to measure activity behaviours in patients with MPE, predominantly in Caucasian populations, but has rarely been reported in other populations. The purpose of this study was to evaluate physical activity and sedentary behaviour profiles of patients with MPE in a Chinese population, and to explore relationships between activity behaviours and quality of life (QoL).  **Methods:** Eligible participants wore an Actigraph GT3X+ accelerometer continuously for 7 consecutive days. A valid day was defined as 8-h/day of waking wear time and participants with ≥1 valid days were included. The EuroQoL­5 Dimensions­5 Levels (EQ­5D­5L) was used to assess five dimensions of QoL (i.e. mobility, self-care, usual activities, pain/discomfort, anxiety/depression) and correlated with activity behaviours using spearmans rank order correlations.  **Results:** 51 patients with MPE received accelerometers; 48 (94%) had ≥1 valid days of  data. Relative to waking hours, participants spent limited time participating in light activities [mean 23% (SD 1.40)] and moderate-to-vigorous physical activity (MVPA) [median 0.3% [IQR 0.0 – 1.5]]. Participants spent most of their waking hours sedentary [mean 76% (SD 2.32)]. Increased light and MVPA behaviours were associated with increased participation in self-care tasks (rs= -0.43, p= 0.003; rs= -0.45, p= 0.001 respectively) and usual activities (rs= -0.42, p= 0.003; rs= -0.45, p= 0.001 respectively). In contrast, sedentary behaviours  were associated with poorer participation in self-care tasks (rs= 0.41, p= 0.004).  **Conclusion:** This is the first reported study measuring physical activity using accelerometry in Chinese patients with MPE, showing this cohort demonstrate high sedentary behaviours and low physical activity which correlate with important dimensions of QoL.  **Grant Support:** Nil. |