Data analysis

Data analyses were performed using SPSS Statistics 24. Descriptive statistics were drawn from demographic and clinical features of the sample including age, years since cancer diagnosis, performance status, cancer stage, duration of CP and type of cancer. We used linear mixed model analysis for repeated measures with post 3D HMD VR and 2D screen pain and presence scores as dependent variables for post 3D HMD VR and 2D screen time points. These regressions included a factor for the condition (3D HMD VR and 2D screen), the sequence (randomised sequence of conditions between subjects) and time (randomised sequence of conditions within subjects), where sequence was modelled as a random effect. The analysis controlled for baseline (pre-randomisation) pain intensity in models where post-intervention pain intensity was the dependent variable. We also used paired sample T-test to compare pre-post mean difference scores for pain, presence and ESAS items within each treatment condition. Thematic analysis was used to identify, organise, describe and report themes arising from the semi-structured interview.