Oral presentation | Practice (Implementation)

[9]Oral presentation

[9-5] Development and clinical study of interactive art programs for rehabilitation

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We have studied two interactive art programs for rehabilitation. A virtual reality(VR) program was developed in which patients perform standing-up and sitting-down rehabilitation exercises based on interactive changes in VR images, and the level of exercises achieved is reflected in the images as feedback. In a recovery-phase rehabilitation hospital, the patients who used the program rated their enjoyment of rehabilitation significantly higher than those who did not use the program. The patients who used the program also found that rehabilitation was more enjoyable after the exercise than before. In addition, the number of movements increased significantly by continuing exercises over a long time period. Furthermore, focusing on respiratory rehabilitation for maintaining and improving swallowing function, we have developed a program that involves production of an artwork into which breath is blown. The rehabilitation session consisted of strongly blowing into an artwork doll 10 times in a row per day for 30 days. The swallowing function of elderly people who need nursing care remained in as good condition as before the sequence. As the participants completed the respiratory rehabilitation sessions for a full 30-days it indicates the program using their own artworks is effective for sustaining rehabilitation on a long-term basis.