Clinical changes in behaviour eliceted by Guided Tactual Interaction Therapy

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Purpose

The purpose of this study was to clarify whether persons with acquired, very severe brain damage may change behaviour during treatment, and if so, to identify favourable and differentiated treatment responses. The authors' vague observations over years of these patients' changeability during very individually tailored therapy lead to application of guided tactual interaction therapy (GTIT) according to the Affolter-Modell® to clarify the question.

Methods

An observationbased intervention study in five adults with aquired severe brain injury.

Inclusion criteria:

- A general state allowing daily participation in the general neuro-rehabilitation service
- A Rancho Los Amigos Score (RLAS) of 2, 3 or 4 at first intervention
- Consecutively admitted to neurorehabilitation

RLAS is a scale measuring cognitive level of functioning. The lowest score is 1, 8 highest. The project participants presented severe disabilities. Their behaviour revealed fluctuating levels of consciousness, and some were in a minimal conscious state. They all received nutrition through gastric feeding tube (PEG), were paretic in 1 or 2 extremities, and all had affected trunk control. They presented signs of confusion and hallucinations and some could be confabulating. They rarely or never seemed to understand spoken language. They could not carry out basic activities from daily life.

Exclusion criteria:

- Congenital or earlier acquired brain injuries
- Other neurological or psychiatric diagnoses

Data collection

- Each patient was treated with GTIT 3 times; four patients in three consecutive days and one patient within 4 days.
- Each intervention lasted approximately 20 minutes.
- All interventions were videotaped

Processing data

Individual video analyses

Project person A | Guiding person | Assistant

First consensus analysis

Project person A; Guiding person; Assistant

Second consensus analysis

Project person A; Project person B; Project person C

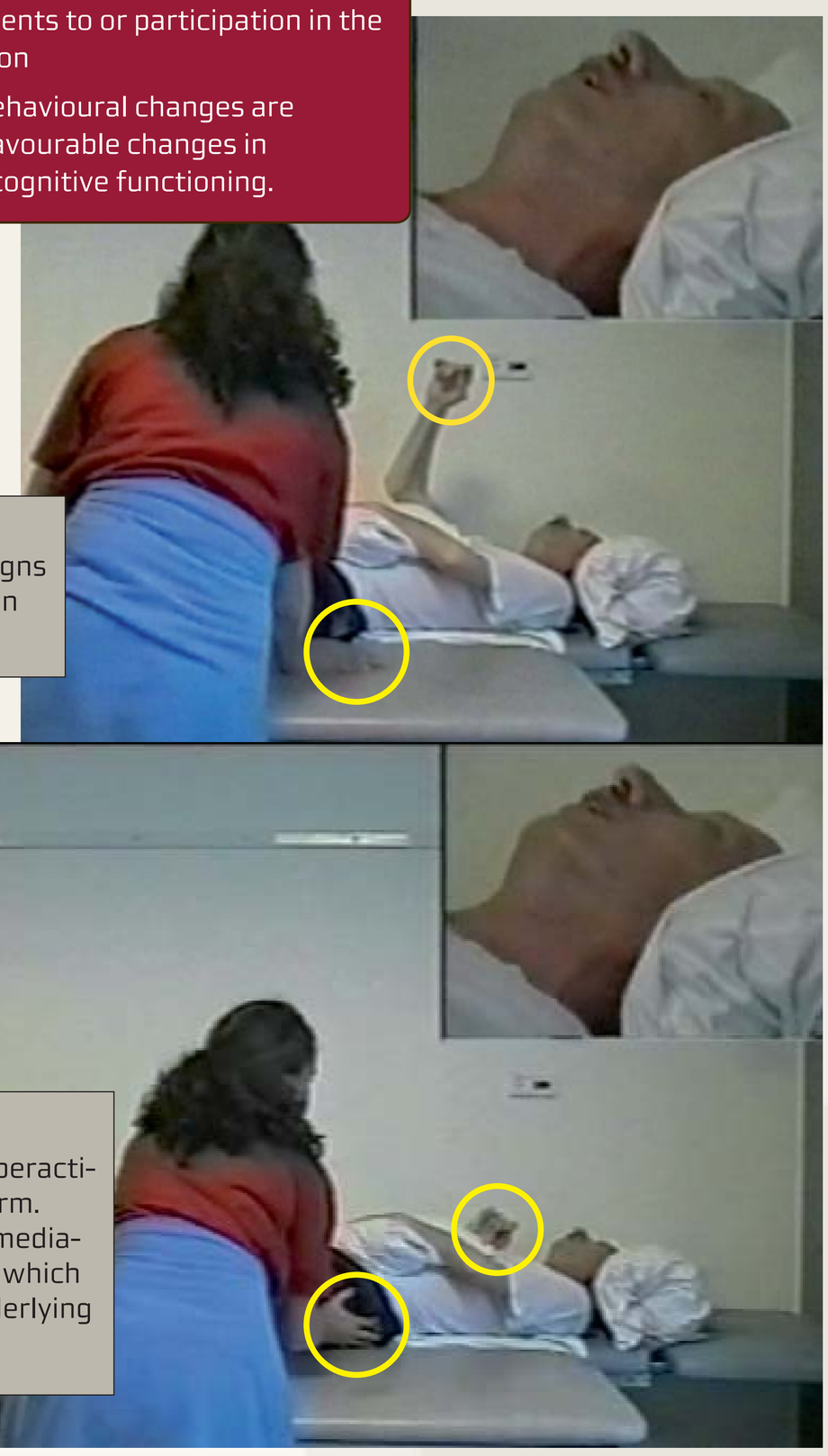
Interpreting data

Results

The participants' changes in behaviour represent 34 different subtypes, all of which appeared in patterns. They were classified in the following maintypes:

- Normalisation of muscle tone, as reduction or building up, making postural adjustments or other movements possible
- Decrease or cessation in hyperactivity
- Changes in the direction and expression of the eyes
- Active adjustments to or participation in the specific situation

The identified behavioural changes are interpreted as favourable changes in perceptual and cognitive functioning.



Situation 1
Patient shows signs of hyperactivity in

Situation 2
Cessation off hyperactivity in patients arm. Guiders hand is mediating information which refers to the underlying support.

Conclusion

- **To conclude, individual changes towards less pathological behaviour were seen in five patients with severe brain injury receiving GTIT, manifested by many individually grouped subtypes of changes.**
- **The subtypes could be categorised according to the expressions of the behavioural changes and may also be related to different levels of perceptual organisation.**
- **The study presents an observation and treatment model of the individual patient's ability to rise in response level in an individually tailored treatment situation, applying GTIT.**
- **There seems to be the basis for larger studies on individual response behaviours elicited by GTIT targeting selected patient groups with acquired, severe brain damage.**

Clinical changes in behavior

- The clinical changes in behaviour were directly related to mediations of presumed crucial tactual information, according to GTIT
- The clinical changes in behaviour showed a change towards less pathological behaviour
- Each clinical change in behaviour occurred at least twice within one single patient treatment

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Guided Tactual Interaction Therapy

During guided interaction therapy activities are carried out with the person and not for the person. The therapist guides the person's hands/body in a problem solving event from daily life. When guided interaction therapy is applied, the person's ability to gather tactual information necessary for experiencing and participating in a given activity is optimized. Guided interaction therapy is assumed, through relevant changes in the topological interaction relations, to mediate and clarify the tactual information, which the person him/herself would have induced during own carrying out of the actions, had it been possible. In this study the chosen activity was getting dressed, and nursing guiding was applied to the participans, primarily in lying position.