

ABSTRACT

Assessing test norms of a neuropsychological test battery at the Forel clinic

Most alcoholics do not meet criteria for either an amnesic disorder and/or a dementia associated with alcoholism. But there is no doubt that alcohol is a neurotoxic agent and has negative effects on the brain and can cause brain damage and dysfunction.

Several studies showed that alcoholics most frequently perform at levels similar to those of brain damaged subjects on several neuropsychological tests that place demands on attention and concentration skills, executive functioning, abstraction, problem solving, visuo-spatial abilities, learning and memory. In fact they show a „typical“ neurocognitive profile which allows to assess the functional state and the severity of the impairment.

In many alcohol treatment programs the great attempts undertaken are often followed with low success. These programs are put into execution regardless of the neuropsychological deficits that place significant limitations on the ability to utilize the standard treatment modalities. We assume that neuropsychological test performance at the beginning of each treatment program can be helpful in improving success rates.

Since 1998 mostly all alcohol dependent patients at the Forel clinic are assessed with a neuropsychological battery to rate dysfunction and cognitive impairment. An evaluation was carried out on a sample of 139 subjects. Unfortunately the available normative data for this test battery are not appropriate due to uncomparable samples and because cultural environment.

The aims of the present project are:

- to obtain normative data for the neuropsychological battery;
- to develop a quantification of the cognitive impairments of alcoholics;
- to evaluate the neuropsychological battery for diagnostics and treatment programs;

- to generate individual neurocognitive profiles;
- to obtain a basis for assessing progression.

A sample of 75 „normal“ controls (45 male / 30 female) without alcohol problems and matched for age and socioeconomic status will be tested using a test battery of 11 tests:

1. Rey Auditory-Verbal Learning Test (Rey, 1964);
2. Rey Visual-Design Learning Test (Rey, 1964);
3. Assoziationslernen after Goldenberg (Goldenberg et al., 1989);
4. Stroop-Test (Stroop, 1935; Peret, 1974);
5. Fünf-Punkte-Test (Regard et al., 1982);
6. Fluency S-Words (Thurstone et al., 1948);
7. 3 tests out of the „Testbatterie zur Aufmerksamkeitsprüfung“ (TAP) (Zimmermann et al., 1992);
8. Wisconsin Card Sorting Test – modified (Nelson, 1976);
9. Mehrfachwahl-Wortschatz-Intelligenztest (Lehrl et al., 1993);
10. Rey-Osterrieth Complex Figure Test (Rey 1941; Rey, 1959; Oesterrieth, 1944; vgl. Spreen & Strauss, 1991);
11. Inventory to Diagnose Depression (Kühner, 1997).

Results of this sample are compared with those of the clinic subjects.

Keywords: alcoholism; neuropsychology; brain damage; dysfunction; testing.