Individualised Treatment of Alcohol Dependent Patients with Baclofen: A Clinical Observation

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Aims: The objective of this clinical observation was to investigate the effectiveness and tolerability of baclofen in individualised doses for the treatment of alcohol dependence in 15 people with co-occurring mental disorders.

Methods: Baclofen doses were titrated individually in response to the participants' reports of their reductions in drinking and craving. At the start and the end of the observation period (24 weeks) patients self-reported their number of standard drinks per day and rated their alcohol craving by means of the Obsessive Compulsive Drinking Scale (OCD-S). Furthermore, liver enzymes, carbohydrate deficient transferrin (CDT) and Ethyl Glucuronide in hair (HEtG) were determined at the beginning and the end of the observation period.

Results: Mean dose of baclofen at the end of the observation period was 116 mg/day (± 55 mg; range 30-225 mg/day). There were no serious side effects. Eleven patients were abstinent or low-risk-drinking at the end of the observation period. The clinical presentation of a male patient also improved although his alcohol consumption remained higher than the NIAAA recommendations. Three male participants did not benefit from treatment. They increased their alcohol consumption under higher doses. Despite their increased alcohol consumption these participants asked for a continuation of treatment.

Tab. 1: Blood testing results

Pat.-Nr.	gender	age [y]	MCV [fl]		ASAT [U/l]		ALAT [U/l]		GGT [U/l]		CDT [%]	
			T_1	T_2	T_1	T_2	T_1	T_2	T_1	T_2	T_1	T_2
1.	m	35	94.0	92.0	11.0	17.0	12.0	11.0	81.0	11.0	1.8	1.5
2.	f	58	94.0	90.0	17.0	18.0	18.0	22.0	46.0	6.0	2.5	1.6
3.	f	34	-	-	17.0	21.0	21.0	19.0	17.0	17.0	1.8	1.7
4.	f	44	88.0	84.0	15.0	16.0	20.0	17.0	24.0	27.0	1.5	1.7
5.	f	66	86.0	84.0	57.0	16.0	-	18.0	-	18.0	-	1.8
6.	m	50	-	92.0	71.0	19.0	98.0	18.0	109.0	22.0	-	2.4
7.	m	42	95.0	95.0	27.0	36.0	36.0	36.0	67.0	51.0	4.7	7.6
8.	m	40	89.0	90.0	25.0	29.0	21.0	26.0	60.0	53.0	-	2.8
9.	m	38	102.0	103.0	21.0	30.0	44.0	49.0	185.0	274.0	2.1	1.7
10.	m	46	-	-	19.0	23.0	29.0	64.0	18.0	50.0	1.7	2.1
11.	f	46	99.0	96.0	27.0	33.0	24.0	28.0	23.0	11.0	9.4	2.7
12.	m	32	91.0	91.0	32.0	37.0	78.0	58.0	72.0	73.0	1.8	1.5
13.	m	38	100.0	94.0	29.0	26.0	47.0	45.0	160.0	111.0	-	2.2
14.	m	30	99.0	91.0	16.0	33.0	17.0	18.0	-	16.0	1.8	-
15.	m	38	-	-	92.0	65.0	56.0	52.0	370.0	76.0	2.2	1.8

T_1: beginning of the observation
T_2: end of the observation
-: missing value

Tab. 2: OCD-S, standard drinks per day, HEtG, baclofen dosage and duration of dependence

Pat.-Nr.	gender	age [y]	MCV [fl]		ASAT [U/l]		ALAT [U/l]		GGT [U/l]		CDT [%]	
			T_1	T_2	T_1	T_2	T_1	T_2	T_1	T_2	T_1	T_2
1.	m	35	94.0	92.0	11.0	17.0	12.0	11.0	81.0	11.0	1.8	1.5
2.	f	58	94.0	90.0	17.0	18.0	18.0	22.0	46.0	6.0	2.5	1.6
3.	f	34	-	-	17.0	21.0	21.0	19.0	17.0	17.0	1.8	1.7
4.	f	44	88.0	84.0	15.0	16.0	20.0	17.0	24.0	27.0	1.5	1.7
5.	f	66	86.0	84.0	57.0	16.0	-	18.0	-	18.0	-	1.8
6.	m	50	-	92.0	71.0	19.0	98.0	18.0	109.0	22.0	-	2.4
7.	m	42	95.0	95.0	27.0	36.0	36.0	36.0	67.0	51.0	4.7	7.6
8.	m	40	89.0	90.0	25.0	29.0	21.0	26.0	60.0	53.0	-	2.8
9.	m	38	102.0	103.0	21.0	30.0	44.0	49.0	185.0	274.0	2.1	1.7
10.	m	46	-	-	19.0	23.0	29.0	64.0	18.0	50.0	1.7	2.1
11.	f	46	99.0	96.0	27.0	33.0	24.0	28.0	23.0	11.0	9.4	2.7
12.	m	32	91.0	91.0	32.0	37.0	78.0	58.0	72.0	73.0	1.8	1.5
13.	m	38	100.0	94.0	29.0	26.0	47.0	45.0	160.0	111.0	-	2.2
14.	m	30	99.0	91.0	16.0	33.0	17.0	18.0	-	16.0	1.8	-
15.	m	38	-	-	92.0	65.0	56.0	52.0	370.0	76.0	2.2	1.8

T_1: beginning of the observation
T_2: end of the observation
-: missing value

Conclusion: Baclofen treatment with different individualised doses was associated with suppression or reduction of alcohol consumption and craving in the majority of the participating patients . The health condition of three men worsened even under higher dosages of baclofen. Given the high motivation for baclofen treatment of our sample, we caution against an overestimation of its effects.