

mECT,  $p = 0.055$ . This was maintained once mECT was stopped. This compared well with comparison group who went on to receive other maintenance therapy (for the same period to control for secular changes), where both admission rates and bed occupancy went up. The change in duration of hospital stay between the two groups were statistically very significant ( $p < 0.001$ ) in favour of the mECT group.

**Conclusion:** The findings suggest that mECT may have a role in reducing the rate and duration of hospital stay of patients with major depressive disorder. The main weaknesses are the small sample size. This may translate in to socio-economic benefits both for the patients and the health services.

### P0315

ECT in the elderly with catatonic schizophrenic disorder-A case report

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**Case history:** a 69 year old man with drug resistant catatonic schizophrenic disorder was treated at the psychiatric clinic of a general hospital with courses of ECT. In the past he had also responded positively to the same treatment.

Course of the treatment: patient was admitted because of catatonic symptoms such as immobility, mutism and negativism. During his two hospitalizations, a total of 48 ECT sessions was given with encouraging results. Namely after the first hospitalization the patient left the hospital in excellent condition, where as in the second occasion results were fair.

**Treatment:** ECT is one of the first somatic therapies in the history of psychiatry. In 1938 Cerletti and Bini administered the first successful treatment of schizophrenia inducing epileptic seizures via electricity. Today ECT is given under general anaesthesia including muscles relaxation, in organized hospital units and thus it is a safe and well tolerated therapy.

**Conclusion:** our case report confirms the fact that in elderly ECT seems to have good results and few side effects.

### P0316

Electroconvulsive therapy at a county hospital between 1993 and 2003: ECT- parameters, side effects and outcome

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**Background and Aims:** This study is a retrospective analysis of the clinical use of ECT at a county hospital in Norway. Our aim was to determine the ECT- parameters, effect and side effects of patients that received ECT and compare standards of ECT practice with similar studies conducted elsewhere.

**Methods:** The study is based on data collected from specific ECT journals and the patients' hospital journals. We investigated treatment

characteristics, side effects (headache, memory problems and others), and effect which was measured as either present or not present. The number of necessary sessions before effect was achieved was also registered.

**Results:** 210 patients received ECT in the study period. The mean number of ECT treatments was 7.9. Bilateral electrode placement was used for 63.3%. The analyses suggest that a unilateral placing of electrodes tended to increase the average number of treatments compared to the bilateral placing of electrodes. The level of energy compared to the placement of electrodes seemed to indicate that unilateral treated received higher energy than those who had the bilateral placing of electrodes. We found that high stimulus dosage required shorter cramps. Common side effects included headache (N=86), retrograde amnesia (N=31) and others (N=17), no side effects (N=28), missing data (N=65).

82.2% of patients improved with treatment, 51.1% experienced improvement between treatment 4 and 7, 17.8% patients did not respond to the treatment, missing data 35.7%.

**Conclusions:** Our findings are mainly in concordance with previous reports of ECT use in public funded hospitals.

### P0317

Stereotactic neuronavigation of rTMS in the treatment of auditory hallucinations: A pilot study

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**Objectives:** It was repeatedly reported that low frequency rTMS diminishes treatment-resistant auditory hallucinations. The main drawback to rTMS in general, so far has been the impossibility of precise targeting of the rTMS coil at the given cortical area. Stereotactic neuronavigation is a unique technology utilising the ability of aiming the coil with a high degree of anatomic accuracy based on an evaluation of the structural or functional neuroimaging of the brain.

**Aim:** To prove the clinical effect of using rTMS neuronavigation in the therapy of treatment-resistant auditory hallucinations

**Methods:** Seventeen schizophrenic patients with predominantly symptoms of treatment-resistant auditory hallucinations were treated.

Using double-blind sham-controlled parallel design, we evaluated the effect rTMS neuronavigation focused over the left temporo-parietal area, direct to the place with the highest metabolic activity (SPM II analysed PET contrast).

Parameter settings were: 0.9Hz, MT 100%, 1080 puses/session, 10 sessions, duration: 20 minutes per session.

Clinical effect was assessed using PANNS, AHRS and HCS.

**Results:** We found a significant improvement in the total on scales of HCS and AHRS, representing more than 30% reduction of the symptoms after neuronavigated rTMS. Sham rTMS did not showed a trend for improvement over time. No side effects during rTMS were observed.

**Conclusions:** Our study shows the acute effect of rTMS neuronavigation in the therapy of auditory hallucinations in schizophrenia. We believe that using neuronavigation and respecting an individual brain parameters and metabolic changes, we can evaluate higher efficiency of the rTMS method.

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