Excellent lithium responders

- Identified by Canadian researchers
- Percentage of excellent lithium responders: about 1/3 of lithium treated bipolar patients

A specific personality profile for the best lithium response was not estimated in line

The aim of the study

To correlate the scores of the Alda scale with two psychometric scales:

- Temperament Scale of Memphis, Pisa, Paris and San Diego – Autoproponentnaire (TEMPA-A)
- Oxford-Liverpool Inventory of Feelings and Experiences (LIFE-O)

in 70 long-term lithium-treated patients

Patients studied

- Seventy lithium-treated patients with bipolar illness
- 21 male, 49 female
- Aged 31-82 (59±12) years
- Duration of lithium treatment 5-37 (14±8) years

Hyperthymic temperament and lithium response

- Prima of antimanic action of lithium
- Better efficacy of lithium in euphoric vs dysphoric mania
- Met allele of Val66Met BDNF polymorphism
  - Associated with hyperthymic temperament
    - (Savitz et al., 2008)
  - Associated with lithium response
    - (Rybalkowski et al., 2005; Dmitrzak-Weglarz et al., 2008)

O-LIFE and lithium response

- A significant negative correlation (p<0.05) with the results of Alda scale was obtained with cognitive disorganisation
  - No significant correlation (numerically all negative) was found with unusual experiences, introvertive anhedonia and impulsive nonconformity

O-LIFE and Lithium response

- The most significant positive correlation was obtained with hyperthymic temperament
  - Significant negative correlations were obtained with anxious and cyclothymic temperaments and borderline significance with depressive temperament.
  - No correlation was found with irritable temperament.

- The mean score for the five temperaments of TEMP-A were not significantly different in male and female patients:
  - This is in contrast to recent meta-analysis of other temperament studies on healthy populations

- No hyperthymic temperament

- No cyclothymic, depressive and irritable temperaments

- Studied patients from Poland

Correlations between temperaments and quality of lithium prophylactic response assessed by Alda Scale in 70 bipolar patients

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Depressive</th>
<th>Cyclotymic</th>
<th>Hyperthymic</th>
<th>Irritable</th>
<th>Aroused</th>
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<tbody>
<tr>
<td>Depressive</td>
<td>0.233*</td>
<td>-0.256**</td>
<td>0.306**</td>
<td>0.020</td>
<td>-0.273**</td>
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<tr>
<td>Cyclotymic</td>
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<tr>
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<td></td>
<td>0.306**</td>
<td></td>
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<tr>
<td>Irritable</td>
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<td></td>
<td></td>
<td></td>
<td>-0.273**</td>
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<tr>
<td>Aroused</td>
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Correlations between schizoid traits and quality of lithium prophylactic response assessed by Alda Scale in 70 bipolar patients

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Unusual experiences</th>
<th>Cognitive impotence</th>
<th>Introvertive anhedonia</th>
<th>Impulsive nonconformity</th>
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<tr>
<td>Aroused</td>
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</tr>
</tbody>
</table>

Cognitive disorganisation

- Cognitive disorganisation of schizotypal dimension is most closely connected with psychosis in both schizophrenia and bipolar disorder
- No evidence for antipsychotic properties of lithium

References

- Grof P. in: Lithium: 50 Years of Psychopharmacology, pp.36-51.
- Grof P. Neuropsychopharmacology 2010; 42: 27-35.
- Veverka E. Genet Brain Behav 2008; 7: 63-68.

Temperamental features of hypomania (hyperthymic temperament) and lack of cognitive disorganisation predict the best results of lithium prophylaxis