PARALLEL SESSION 3 – FRIDAY JUNE 21ST 2019, 10h30 – 12h00
Unravelling symptom formation in Irritable Bowel Syndrome by momentary assessment

- J. Kruimel: Integrated medical–psychiatric outpatient care in functional gastrointestinal disorders improves outcome
- Z. Mujagic: How to measure abdominal pain in Irritable Bowel Syndrome?
- L. Vork: The Experience Sampling Method: Evaluation of treatment effect of escitalopram in IBS with comorbid panic disorder
- J. Peters: Network approach of emotion and bodily symptom dynamics in relation to childhood adversity in patients with IBS and comorbid panic disorder

Theme
Psychological comorbidity is frequent and may play a pivotal etiological and/or mediating role in somatic medicine, in particular in functional disorders, such as Irritable Bowel Syndrome (IBS). The treatment of visceral pain and other symptoms in IBS is challenging. Poor treatment outcomes might be attributable to untreated or possibly unrecognized underlying psychological disorders, and moreover, may be due to poorly understood formation and course of symptoms in IBS. Furthermore, measuring treatment effect of symptoms in functional disorders is challenging, due to inadequate assessment methods.

The current symposium will provide an integrated overview of psychosomatic interrelation in gastroenterology, in particular IBS, with a specific focus on momentary symptom assessment methods, i.e. Experience Sampling Method (ESM).

Takeaways
1) For functional gastrointestinal disorders with comorbid psychiatric conditions an integrated care approach is of utmost importance for sustainable treatment effects.
2) Symptom assessment in Irritable Bowel Syndrome is challenging, and currently available assessment methods have limitations, which can be overcome by digital momentary symptom measurement.
3) Momentary symptom assessment by Experience Sampling Method (ESM) has the potential to capture treatment response in IBS patients more sensitively compared to a retrospective symptom scores, by taking into account day-today symptom variability as well as momentary factors that might moderate treatment effect, such as anxiety.
4) ESM can be used to prospectively predict associations between affective states and gastrointestinal symptoms and vice versa in patients with IBS and panic disorder (with or without trauma).

Chair: Zlatan Mujagic, Resident Gastroenterology-Hepatology, Maastricht University Medical Center+, NL

Co-chair: Carsten Leue, Psychiatrist, Maastricht University Medical Center+, NL
Integrated medical–psychiatric outpatient care in functional gastrointestinal disorders improves outcome

Aim
We provide multidisciplinary outpatient consultations by a gastroenterologist and a psychiatrist using an integrated approach toward somatic and psychosocial factors in complex functional gastrointestinal disorders. The aim of this study was to determine the efficacy of this approach assessing gastrointestinal and psychiatric symptoms and quality of life.

Methods
All patients with complex functional gastrointestinal disorders visiting for consultation were included and treated with antidepressants, psychotherapy, or both, or given advice for treatment in their own region. Questionnaires testing gastrointestinal and psychiatric symptoms, and quality of life at first visit and after 6 and 12 months were completed.

Results
124 patients were included (70% women, mean age 48 years): 57% were diagnosed with irritable bowel syndrome and about 80% had a psychiatric diagnosis (50% anxiety disorder, 20% mood disorder). Of the patients, 57% were treated with antidepressants and psychotherapy, 6% with psychotherapy alone, and 38% received advice for treatment in their own region. After 1 year, patients showed significant improvement in all questionnaires, with the exception of those testing gastrointestinal symptoms, although there were significant improvements in these at 6 months.

Conclusion
This is a prospective study on the efficacy of an integrated medical–psychiatric outpatient care model in patients with complex functional gastrointestinal disorders, showing significant improvement in gastrointestinal and psychiatric symptoms as well as quality of life after 6 months. With the exception of improvement in gastrointestinal symptoms, improvement persisted at the 1-year follow-up. This indicates that longer follow-up focusing on gastrointestinal symptoms may be needed.

Reference

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How to measure abdominal pain in Irritable Bowel Syndrome?

Aim
To systematically review the literature with respect to instruments of measurement of chronic abdominal pain in IBS patients, and to compare symptom assessment by ESM to retrospective paper questionnaires in IBS patients.

Methods
Systematic literature search was performed for studies using pain measurement instruments in patients with IBS and furthermore, a pilot study was performed in 26 IBS patients (Rome III), of which 16 were diagnosed with panic disorder, to compare symptom assessment using ESM for 7 days to end-of-day diaries during 14 days and the gastrointestinal symptom rating scale (GSRS) once.

Results
A multitude of instruments is currently used to assess chronic abdominal pain in IBS patients. Single item methods, e.g. the validated 10-point numeric rating scale (NRS), and questionnaires assessing gastrointestinal symptoms severity, focus mostly on the assessment of only the intensity of abdominal pain. Of these questionnaires the validated IBS-Symptom Severity Scale includes the broadest measurement of pain related aspects next to other gastrointestinal symptoms. General pain questionnaires and electronic momentary symptom assessment tools have been used to study abdominal pain in IBS patients, but have not yet been validated for this purpose. In the pilot study, end-of-day diary and GSRS abdominal pain scores were higher compared to corresponding ESM mean-scores in IBS patients. Furthermore, all tested symptoms were scored higher on GSRS compared to ESM mean-scores. Affective comorbidity did not influence differences in pain reporting between methods.

Conclusion
For symptom assessment in IBS patients, ESM may overcome limitations of the currently available retrospective methods.

Reference
Aliment Pharmacol Ther.2015Nov;42(9):1064-81.
Neuropsychopharmacol Motil.2015Sep;27(9):1295-302.

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The Experience Sampling Method - Evaluation of treatment effect of escitalopram in IBS with comorbid panic disorder

Aim
Confirming treatment response in clinical trials for irritable bowel syndrome (IBS) is challenging, due to the lack of biomarkers and limitations of the currently available symptom assessment tools. The Experience Sampling Method (ESM) might overcome these limitations by collecting digital assessments randomly and repeatedly during daily life. This study evaluated differences in change in abdominal pain between real-time (i.e., ESM) and retrospective (i.e., Gastrointestinal Symptom Rating Scale (GSRS) and an end-of-day symptom diary) measurements, using data of an RCT on escitalopram versus placebo in patients with IBS and comorbid panic disorder.

Methods
Twenty-nine IBS patients with comorbid panic disorder were included in a 6-month RCT. The GSRS, diary, and ESM were completed at baseline (t=0) and after 3 (t=3) and 6 months (t=6). Linear mixed models were used.

Results
ESM analyses revealed a significant interaction between escitalopram and time, and ESM abdominal pain scores were 1.4 points lower in the escitalopram group compared to placebo at t=6 (on a 1-to-7 scale; p=0.021). When including the interaction with momentary anxiety, the reduction in abdominal pain scores in escitalopram versus placebo was even more pronounced for higher levels of anxiety. Average GSRS- and end-of-day-abdominal pain scores were not significantly different between escitalopram and placebo at t=3 and t=6.

Conclusion
Real-time ESM has the potential to capture treatment response more sensitively compared to a retrospective end-of-day GI-symptom diary and the GSRS, by taking into account day-to-day symptom variability as well as momentary factors that might moderate treatment effect, such as anxiety.

Reference

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Network approach of emotion and bodily symptom dynamics in relation to childhood adversity in patients with IBS and comorbid panic disorder

Aim
To improve understanding of the multifactorial interplay between psychological symptoms influencing gastrointestinal complaints in Irritable Bowel Syndrome (IBS), we aim to investigate the influence of trauma on symptom formation in IBS.

Methods
Using momentary assessment (i.e., experience sampling method (ESM)), data of 24 individuals with IBS and panic disorder were analysed (15 non-trauma, 9 low-trauma patients). Based on multilevel time-lagged regression analysis, networks were constructed. Regression coefficients present the network connections: three negative affects (down, irritated, rush), three positive affects (happy, enthusiastic, cheerful), three gastrointestinal symptoms (abdominal pain, bloating, nausea) and one social item (feeling lonely). Permutation testing is applied to determine the real p-values.

Results
In the low-trauma group nausea had a positive association with feeling down (B=0.173, p=0.034), which implies that gastrointestinal symptom influence emotional state. In the non-trauma group emotional states irritated (B=-0.074, p=0.002) and feeling happy (B=0.113, p=0.036) influence gastrointestinal symptoms but no associations between gastrointestinal symptoms and emotional states were found.

Conclusion
This network study demonstrated that ESM prospectively predicts associations between affective states and gastrointestinal symptoms and vice versa in patients with IBS and panic disorder (with or without trauma). In conclusion, the emotional system seems separated from gastrointestinal functioning in patients with low level trauma during childhood. In comparison with the non-trauma group, this group showed (1) fewer significant associations between all various symptoms and (2) no affective symptoms were associated with higher (or lower) scores on the gastrointestinal symptoms.

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