

## A system for automated quantification of cutaneous electrogastrograms - DTU Orbit (08/11/2017)

### **A system for automated quantification of cutaneous electrogastrograms**

Clinical evaluation of cutaneous electrogastrograms (EGG) is important for understanding the role of slow waves in functional motility disorders and may be a useful diagnostic aid. An automated software package has been developed which computes metrics of interest from EGG and from slow wave recordings from the gastric mucosa and serosa in a reliable and efficient manner. In particular, the frequency and amplitude of the gastric slow waves were computed, after which signal integrity checks were performed to assess if the signals are valid. For validation, manual estimates of the frequency and amplitude were compared to automated estimates. The methods were packaged into a software executable which processes the data and presents the results in an intuitive graphical and a spreadsheet formats. Automated EGG analysis allows for clinical translation of bio-electrical analysis for potential diagnostics, as commonly used in the cardiac field.

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