

## Chapter

## Characteristics and Analysis of ElectroGastroGram Signal

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DOI: [10.1007/978-3-031-35078-8\\_30](https://doi.org/10.1007/978-3-031-35078-8_30) R. Chandrasekaran ·  S. Vijayaraj ·  G. R. Jothi LakshmiCitations 

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## Abstract

In this study the various spectral estimation of the ElectroGastrogram Signals are discussed. The Main objective of the study is to identify the gastroparesis condition using various signal processing techniques. Gastroparesis is one of the pathetic condition in which the stomach fails to digest. Gastroparesis is also called as stomach paralysis. Due to damage or dysfunction of vagal nerve, kahal cells at stomach lining temporary stomach paralysis happen. The immediate stimulation can make the pacemaker of the stomach to get activated and back to digestion process. In this study the stomach signals are preprocessed and spectral estimation techniques are applied to study about the signal spectrum characteristics. The determination of dominant frequencies and features extracted from frequency domain gives vivid description about the abnormalities of the gastric signal. Keywords Gastroparesis, Kahal cells, Spectral Estimation, Pacemaker of Stomach, Dominant Frequency, ElectroGastrogram Signals

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In this study the various investigation for the Gastroparesis condition is discussed. The Gastroparesis is a disease/pathological condition in which the food inside the stomach cannot able to digest or empty in a normal way. The Symptoms of the Gastroparesis includes heart burn, nausea, vomiting sensation, fullnes...

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