



Fig.1 A sample of snoring sound recordings



Fig.2 A sample of bowel sound recordings

Content:

There are a lot of patients who suffer from chronic disease (obstructive sleep apnea syndrome (OSAS) and irritable bowel syndrome (IBS)). Recently the prevalence of these disease is likely to be increasing in many countries. Polysomnography(PSG) and endoscopic test have been used for the diagnosis of these disease respectively. However these test are inconvenience and expensive. Our research group hypothesize that the information on these disease should be embedded in biomedical sounds (e.g. snoring and bowel sounds) from patients. Biomedical sounds can be simply acquired via non-contact and/or non-invasive measurements. The target of our study is to develop the automated diagnosis system based on the analysis of biomedical sounds. We are currently in the process of developing new sophisticated techniques for this purpose. Biomedical sound analysis techniques can be expected to provide an attractive alternative to the conventional diagnosis method of chronic disease.

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