

Acoustic analysis in patients with major depression

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The objectives of this study was to test the hypothesis that major depressive disorder patients suffer from speech and voice impairments, which can be measured by acoustic analysis before and after medication and compared with the normal controls to detect any deviations from normal levels and to detect the effect of medications on the affected parameters.

All medication free major depression patients ($n = 20$) who attend the psychiatry outpatient clinic during two months duration fulfilling the inclusion and exclusion criteria were included in the study. They were assessed using the ICD-10 checklist criteria and Hamilton rating scale for depression. They were compared with an age and sex matched normal healthy control ($n = 20$). Acoustic and spectrographic analysis was performed for all patients before and one month after starting medication. The results showed a significant improvement in jitter, H/V ratio, SD of speaking fundamental frequency, speaking intensity and intervocalic interval, but they still remained significantly different from the controls.

There was a negative correlation between retardation and SD of sFo.