Objective: To describe the vocal pathologies seen in a tertiary care inner city voice clinic in the prior 5 years.

Methods: A database of voice patients evaluated from August 2003 to June 2008 in a tertiary care Children's Hospital voice clinic was reviewed and created. Data was reviewed for demographics, medical history, voice analysis, treatment, and prevalence of vocal pathologies.

Results: 227 patients were studied. Mean age was 7 years; 53% were male. Three hundred seventeen diagnoses were made and included: vocal nodules (42%), gastroesophageal reflux (10%), hyperfunction (6%), velopharyngeal insufficiency (5%) and edema (5%); 7% of patients had no pathology. 66% had a chief complaint of hoarseness - 77% of these had vocal nodules. Of all vocal fold nodule diagnoses, 81% of maximum phonation times were below normal and 77% had normal functional fundamental frequency ranges. Of the 7% of patients with no vocal pathology - 23% of their maximum phonation times were below normal.

In an inner city voice population, the chief complaint of hoarseness predominates with a diagnosis of vocal fold nodules being most commonly found. Of interest, an unexpectedly significant proportion of patients had no vocal pathology identified despite subjective vocal complaints. Further studies are needed to elucidate if there is an environmental influence resulting in transient vocal pathology in an inner city voice population. Our study supports laryngeal examination and speech evaluation in pediatric patients with vocal complaints.