

LEARNING CURVE IN THE CONSTRUCT OF SMARTPHONE-BASED KERATOSCOPE PROTOTYPE FOR KCN SCREENING

Synopsis Diagnosis of KCN mandates sophisticated and costly topographers which are limited as diagnostics in institutes, Cost-effective screening tool for diagnosis of earliest KCN is needed. In a collaborative study with Software professionals, an attempt to create a smartphone-based keratoscope prototype was studied in comparison to keratron based topographer In this study, we analyzed the steep learning curves with respect : a.The prototype make: which needed nearly 3 revisions b. The image quality (mires and optical capture)and fixation target: which also needed prototype modifications and software changes c.Comparison of images obtained on smartphone-based keratoscope vs standard topographer had an interesting interobserver bias due to heat maps and keartometric values. This study highlights the learning curves in a construct of the optical prototype of a Smartphone-based keratoscope which can be used as a screening tool for diagnosis of Keratoconus in the larger population.