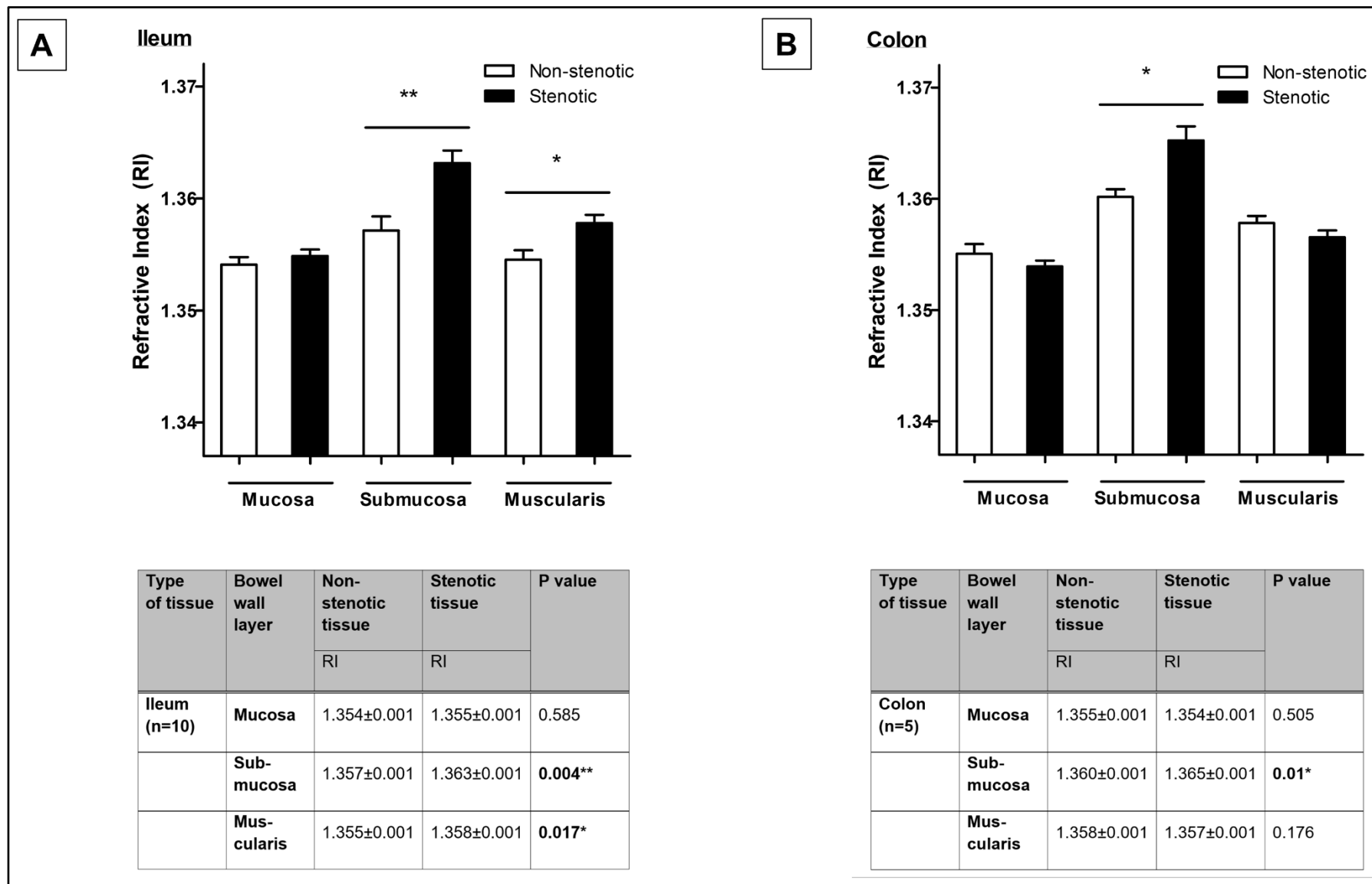


**QUANTITATIVE PHASE IMAGING USING DIGITAL
HOLOGRAPHIC MICROSCOPY RELIABLY ASSESSES
MORPHOLOGY AND REFLECTS ELASTIC PROPERTIES
OF FIBROTIC INTESTINAL TISSUE**

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Supplementary Information: Determination of the refractive index of small bowel and large bowel tissue of Crohn's disease (CD) patients using digital holographic microscopy (DHM). In total, 20 small bowel surgical resection specimen from 10/15 CD patients and 10 large bowel surgical resection specimen from 5/15 CD patients were evaluated. The refractive index (RI), determined by DHM, was assessed in all layers of the bowel wall (mucosa, submucosa, muscularis propria). The RI was significantly elevated in stenotic tissue samples of the submucosa in both, ileum and colonic tissue ($p_{Ileum}=0.004$ and $p_{Colon}=0.01$). Data are mean \pm standard error of mean (SEM). Statistical analysis was performed using Mann-Whitney U test. Two-sided p values < 0.05 were considered statistically significant. Abbreviations: CD, Crohn's Disease; DHM, digital holographic microscopy; RI, refractive index; SEM, standard error of mean.