

# Multiphoton Imaging – Multipurpose Tool

## MPT in mucous membranes

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**Background:** Non-invasive investigation techniques provide benefit for imaging of sensitive and vulnerable structures. MPT allows subcellular resolution and can obtain optical biopsies. Therefore, MPT was used for imaging mucous membrane samples.

**Methods:** Human samples from urinary bladder, palatine tonsil and ocular conjunctiva were imaged by MPT and compared with histology.

**Results:** Comparable histological features were found after comparison of MPT images with histological slices.

**Conclusions:** MPT imaging of mucous membranes was successfully performed. Tissue samples showed characteristic morphology in MPT imaging. Further studies are necessary to evaluate diagnostic applications of MPT imaging in mucous membranes.