This is a common opinion that Meibomian Gland Dysfunction (MGD) is the leading cause of dry eye (DE). The assessment of the ocular surface and of the MG conditions is the basis for the identification of the DE. The Meibography has been called to provide an in-vivo means to assess the structure of the MGD and to indicate DE (Pult et al., 2012). NIBUT and OSDI has been indicated as means helping to diagnose DE. The aim of this study was to investigate the correlations between Meibography, NIBUT and OSDI for the detection of DE. We used a larger and younger sample than the sample examined in the paper from Pult et al. (2012), that we use as a reference work.

As reported in the work by Pult et al (2012) MG loss was significantly higher in the lower lid (LL) than in the upper lid (UL) (p<0.001). The correlation between loss in UL and LL is moderate (r=0.395, p=0.002).

While the results for the LL are very close to Pult (but the 75 percentile of Pult is higher), the results for the UL are lower in our sample: this could be due to the youngest age of the subjects.

The major MG loss for LL in comparison with UL, as reported in other studies (Pult et al., 2012) was confirmed. Contrary to previous studies, no correlation for MG loss with OSDI and with NIBUT was found. This dissimilar findings could be due to the young age of the subject observed (mean 22.9, F11.3). For these subjects there questionable that MG loss can be taken as an indicator for DE. The minor loss in our sample in comparison with that of Pult et al could suggest that with age the situation is worsening especially in the UL.

REFERENCES