Peripheral hypertrophic subepithelial corneal degeneration versus Salzmann's nodular degeneration. Etiology and treatment.

Salzmann's nodular degeneration (SND) and peripheral hypertrophic subepithelial corneal degeneration (PHSCD) are both rare subepithelial lesions that mainly affect females over 50 years of age. They resemble each other but also have specific characteristics. SND usually locates in mid-periphery and the nodules are round and rather small, while PHSCD generally creates a larger, arcuate or boomerang shaped fibrosis close to limbus in nasal or upper nasal quadrant. There are often superficial vessels growing over the limbus up to the base of the fibrosis in PHSCD, but vessels are rarely seen in SND. SND and PHSCD are both mainly bilateral, but the lesions are more symmetrical in PHSCD than in SND.

Elevated lesions might cause irritation, but also changes in corneal curvature and astigmatism. If the patient suffers from visual symptoms surgical treatment can be considered. Manual keratectomy is a valid treatment option and can be combined to application of Mitomycin C. Excimer laser treatment (PTK) can be used as a single treatment or combined to manual keratectomy, and amniotic membrane transplantation can be used as additional treatment. All patients should be advised to use lubricants.