A case study:
the Flattening Effect
of EPI-ON Cross-Linking

TETYANA TABALYUK, ANATOLIY
VAVRYSHCHUK
Ternopil University Clinic, Ukraine

No financial interest
Purpose & Methods

**Purpose:** to evaluate a 2 years flattening effect of epi-on cross-linking in posttraumatic keratitis

**Patient:** 47 y/o, male (OD)

**Methods:**
- Epi-On CXL
- UCVA
- BSCVA
- autorefractometry
- pachymetry
- central keratometry
- OCT

*Keratitis* was unsuccessfully treated *conservatively* more than half a year after a *blunt injury*
Visual Acuity Dynamics

*BCVA = 1,0 with Digiform BC 9,0 mm +3,0 D scleral lens
# Results

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical refraction</td>
<td>Em</td>
<td>Hm 3 D</td>
</tr>
<tr>
<td>Physical refraction</td>
<td>K₁ 42,5 D</td>
<td>36,5 D</td>
</tr>
<tr>
<td></td>
<td>K₂ 43,0 D</td>
<td>37,0 D</td>
</tr>
<tr>
<td>Central keratometry</td>
<td>R₁ 7,8 mm</td>
<td>9,0 mm</td>
</tr>
<tr>
<td></td>
<td>R₂ 7,7 mm</td>
<td>8,6 mm</td>
</tr>
<tr>
<td>Pachymetry</td>
<td>762 µm</td>
<td>569 µm</td>
</tr>
</tbody>
</table>
Before CXL

2 years after

OCT
Conclusions

Epi-on cross-linking in 2 years period:

• flattened the cornea in approximately 1.0 mm;
• weakened physical refraction in near 6,0 D;
• weakened clinical refraction in near 3,0 D.

More investigations are necessary for better understanding of the phenomenon.

Thank you for your interest  t.tabalyuk@gmail.com