Difference Between Pinguecula and Pterygium

www.differencebetween.com

Key Difference – Pinguecula vs Pterygium

Both Pinguecula and Pterygium are ophthalmological conditions characterized by the appearance of submucosal elevations on the conjunctiva. These are caused by actinic damages. Consequently, they are found in the areas of the conjunctiva that are mostly exposed to the sun such as the interpalpebral fissure. **Pterygium originates in the conjunctiva on the either side of the limbus and invades the cornea to enter the space occupied by the Bowman layer. Although pinguecula also originates in the conjunctiva on the either side of the limbus it does not invade the cornea.** This is the key difference between pinguecula and pterygium.

What is Pterygium?

Pterygium is a submucosal elevation on the conjunctiva that invades the cornea to enter the space usually occupied by the Bowmans layer. This submucosal growth is made of fibrovascular connective tissues. Pterygium does not cross the pupillary axis. Apart from mild astigmatism, it does not impair the vision significantly.

Pterygia are benign on most occasions, but sometimes they can be the precursor lesions of malignancies such as actinic induced squamous cell carcinomas and melanomas. Therefore it is advisable to carry out pathological investigations to exclude the possibility of any malignant conditions.

Figure 01: Pterygium
When pterygia appear in both eyes those are called bilateral pterygia.

**Causes**

- Excessive exposure to sunlight
- Any condition that makes the eyes dry

**Management**

- Usually, these can be controlled by eye drops.
- Surgical excision is required only if the vision is obscured.

**What is Pinguecula?**

Pinguecula is a yellowish submucosal elevation that originates in the conjunctiva on the either side of the limbus. Unlike pterygium, pinguecula does not invade the cornea. But the presence of a focal conjunctival elevation near the limbus undermines the uniformity of the conjunctiva leading to the uneven distribution of the tear film. This increases the dryness in some areas of the conjunctiva, resulting in the shrinking of those regions, ultimately forming disc like depressions called the “delle”.

Causes and treatment of pinguecula are similar to those of pterygium.

![Pinguecula Image](image-url)
What are the similarities between Pinguecula and Pterygium?

- Both conditions are characterized by the appearance of submucosal elevations on the conjunctiva.
- Excessive exposure to sunlight is the commonest cause of both conditions.
- Both conditions are managed in a similar manner.

What is the difference between Pinguecula and Pterygium?

<table>
<thead>
<tr>
<th>Pinguecula vs Pterygium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinguecula is a yellowish submucosal elevation that originates in the conjunctiva on the either side of the limbus.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cornea</th>
</tr>
</thead>
<tbody>
<tr>
<td>This does not invade into the cornea.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delle</th>
</tr>
</thead>
<tbody>
<tr>
<td>This causes delle.</td>
</tr>
</tbody>
</table>

Summary – Pinguecula vs Pterygium

Pingueculum and pinguecula are submucosal elevations on the conjunctiva arising as a result of the actinic damages following excessive exposure to sunlight. The main difference between pterygium and pinguecula is that pterygium invades the cornea to enter into the space that is usually occupied by the Bowman layer, but pinguecula does not have that invasive nature.

References
