

Understanding Macular Telangiectasia Type 2 (MacTel 2)

What is MacTel 2?

Macular Telangiectasia Type 2 (MacTel 2) is a rare eye condition that affects the macula, the part of your retina responsible for central vision. This condition causes changes in the blood vessels and cells in the retina, leading to vision problems over time.

Key Features of MacTel 2

1. Abnormal Blood Vessels:

- Telangiectasia: Blood vessels in the retina become abnormally dilated.
- Leakage and Growth: These vessels may leak fluid and grow in unusual ways, affecting retinal health.

2. Retinal Degeneration:

- Photoreceptor Atrophy: Cells that detect light (photoreceptors) in the macula deteriorate.
- Ellipsoid Zone (EZ) Loss: A critical layer of the retina thins out or is lost, impacting vision.

3. Structural Changes in the Retina:

- Crystalline Deposits: Small, shiny deposits can appear in the retina.
- Cavitations: Cyst-like spaces can form within the retina, further disrupting vision.

4. Visual Symptoms:

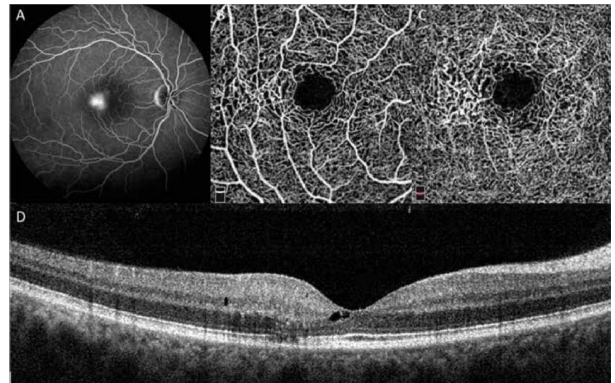
- Distorted Vision (Metamorphopsia): Straight lines may appear wavy or bent.
- Blind Spots (Scotomas): Central blind spots can develop, making it hard to read or recognize faces.
- Reduced Sharpness: Central vision gradually becomes less sharp.

5. Müller Cell Dysfunction:

- Support Cell Changes: Müller cells, which help maintain retinal health, show abnormalities.

6. Imaging Findings:

- Optical Coherence Tomography (OCT): This scan shows detailed images of the retina, revealing changes like EZ loss and cavitations.
- Fluorescein Angiography: This test highlights abnormal blood vessels and leakage.



Disease Progression and Management

MacTel 2 is a progressive condition, meaning it worsens over time. However, new treatments are being developed to slow this progression. One promising therapy is revakinagene taroretcel (NT-

501), which involves implanting a tiny device in the eye that releases a protective protein to help preserve retinal cells. It is hoped to be available in USA late 2024 and then in Europe ? 2025

What You Can Do

- Regular Eye Exams: Keep up with regular check-ups to monitor any changes in your vision.
- Healthy Lifestyle: Maintaining a healthy diet and avoiding smoking can support overall eye health.
- Stay Informed: Keep up with the latest treatments and research.

Need More Information?

For more details on MacTel 2 and the latest treatments, you can visit these resources:

- [MedPage Today: Ocular Implant Producing Neurotrophic Factor Preserves Central Vision in MacTel](<https://www.medpagetoday.com>)
- [Retina Round Up: ASRS 2023 Updates](<https://retinaroundup.com>)

Always consult with your eye care professional for personalised advice and treatment options.

Nicholas Lee 2024