

SO YOU THINK YOU CAN
CONTACT


Contact Lens Considerations


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On behalf of Vision Expo, we sincerely thank you for being with us this year.

Vision Expo Has Gone Green!

We have eliminated all paper session evaluation forms. Please be sure to complete your electronic session evaluations online when you login to request your CE Letter for each course you attended! Your feedback is important to us as our Education Planning Committee considers content and speakers for future meetings to provide you with the best education possible.

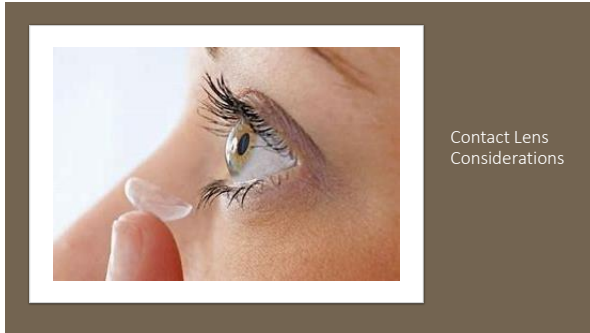


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FINANCIAL DISCLOSURES

Sam Winnegrad has no financial interests to disclose.

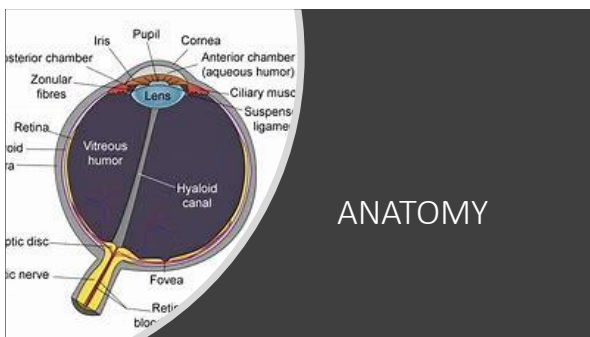
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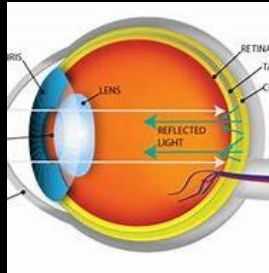
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ANATOMY


The cornea is an avascular, living tissue.

The layers of the cornea form anterior to posterior:

- Epithelium
- Bowmans Membrane
- Stroma
- Descemet's Membrane
- Endothelium



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The average cornea is +43.00 diopters in strength.

Front surface +48.8 D
Back surface -5.8 D

ANATOMY

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ANATOMY



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- Most epithelial abrasions heal within 24 hours
- The corneal-scleral limbus is a 1-2 millimeter junction between the cornea and sclera.

ANATOMY

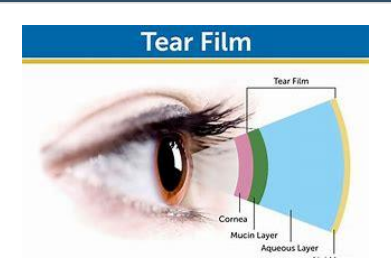
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- It is all too important not to minimize the effect that one's tear film has on their ability to wear contact lenses.

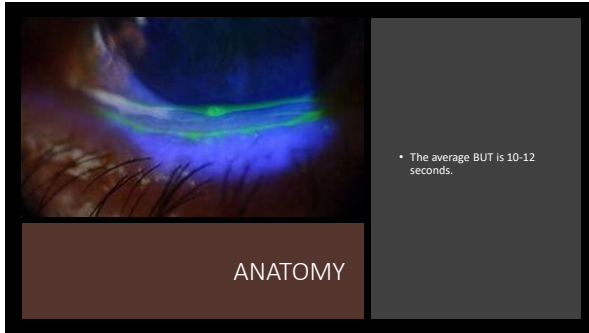
ANATOMY

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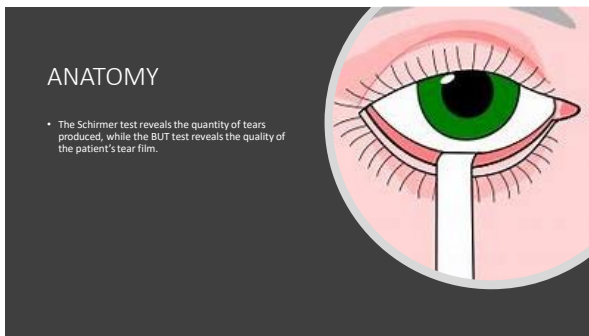


ANATOMY

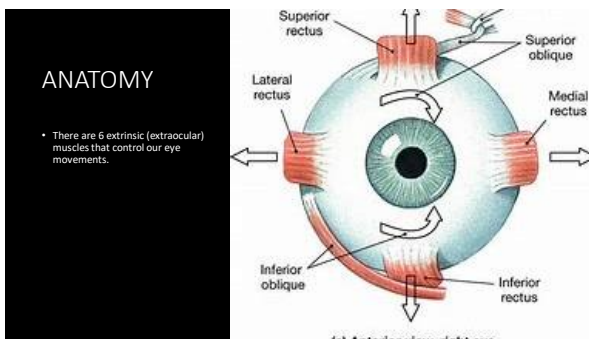
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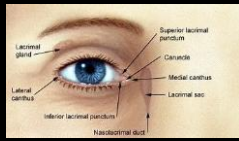


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ANATOMY



- The primary functions of the eyelids are to protect the eye and to spread the tear film across the anterior portion of the globe.

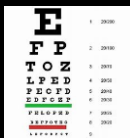
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CONTACT LENS WEARERS



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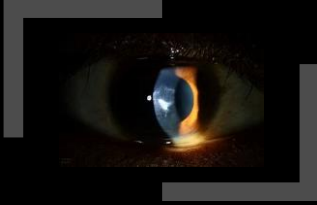
CONTACT LENS WEARERS



- Patients who have a refractive error greater than 1.5 diopters are more likely to succeed with contact lenses.

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CONTACT LENS WEARERS



- Patients with regular, low astigmatism (less than 1.50 diopters) have a better chance for long term success.

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CONTACT LENS WEARERS

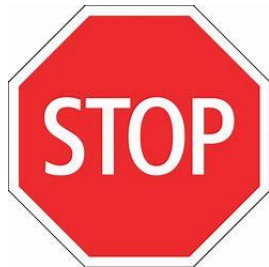


- Albinism
- Nystagmus
- Aniridia

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CONTRAINDICATIONS

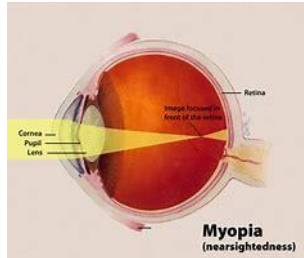
- Patients that have Parkinson's or severe arthritis may have a decreased potential for success due to handling issues



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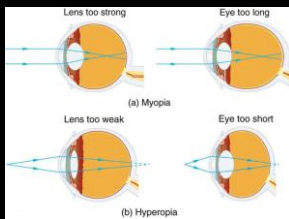
AMETROPIAS

Myopia is where the eye is effectively too strong or "too long."



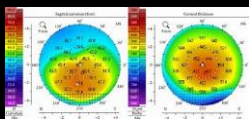
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AMETROPIAS



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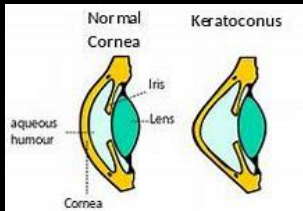
ASTIGMATISM



- WRA is where the vertical meridian is the steepest.
- ARA is where the horizontal meridian is the steepest.

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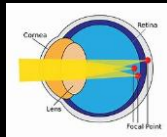
ASTIGMATISM



- Irregular astigmatism is the other type of astigmatism wherein the principal meridians are not perpendicular to one another. This can be caused by trauma, disease or some other form of degeneration. These patients are not usually correctible to 20/20 vision.

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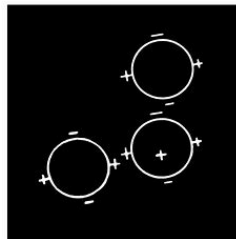
ASTIGMATISM



- We can further classify these astigmatic patients as simple myopic, compound myopic, simple hyperopia, compound hyperopia and mixed astigmatism.

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ASTIGMATISM



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ASTIGMATISM

- The crystalline lens, which supplies on average +17.00 diopters of power can also yield unwanted astigmatism. This astigmatism is referred to as lenticular.



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LENS HISTORY AND MATERIALS



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LENS HISTORY AND MATERIALS



- The material CAB (cellulose acetate butyrate) is credited with being the first gas permeable lens and was first used in contact lenses in 1974

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LENS HISTORY AND MATERIALS



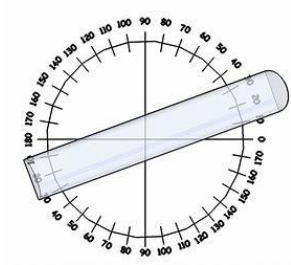
- HEMA, or hydroxymethylmethacrylate, was the first material of soft contact lenses. This is why soft lenses that are not even made of the HEMA material are still affectionately referred to as HEMA lenses.

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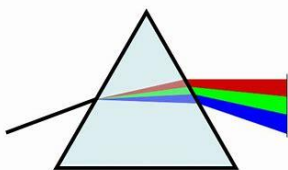
CONTACT LENS ROTATION

- The acronym LARS stands for:
Left Add
Right Subtract

This is one of the reasons why follow-up visits are crucial to a patient's success.



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CONTACT LENS ROTATION

There are many techniques used to stabilize contact lenses to minimize rotation and decentration.

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LENS CARE AGENTS

- Nowadays, most patients use multipurpose solutions that clean, rinse and disinfect.
- Also popular are oxidative chemical disinfection solutions that use hydrogen peroxide to disinfect.

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CONCLUSION



- Without a solid understanding of the fundamentals of the eye and contact lenses it is impossible to make the tough, informed decisions you will inevitably be faced with.

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