

The Expanding Scope of Optometry

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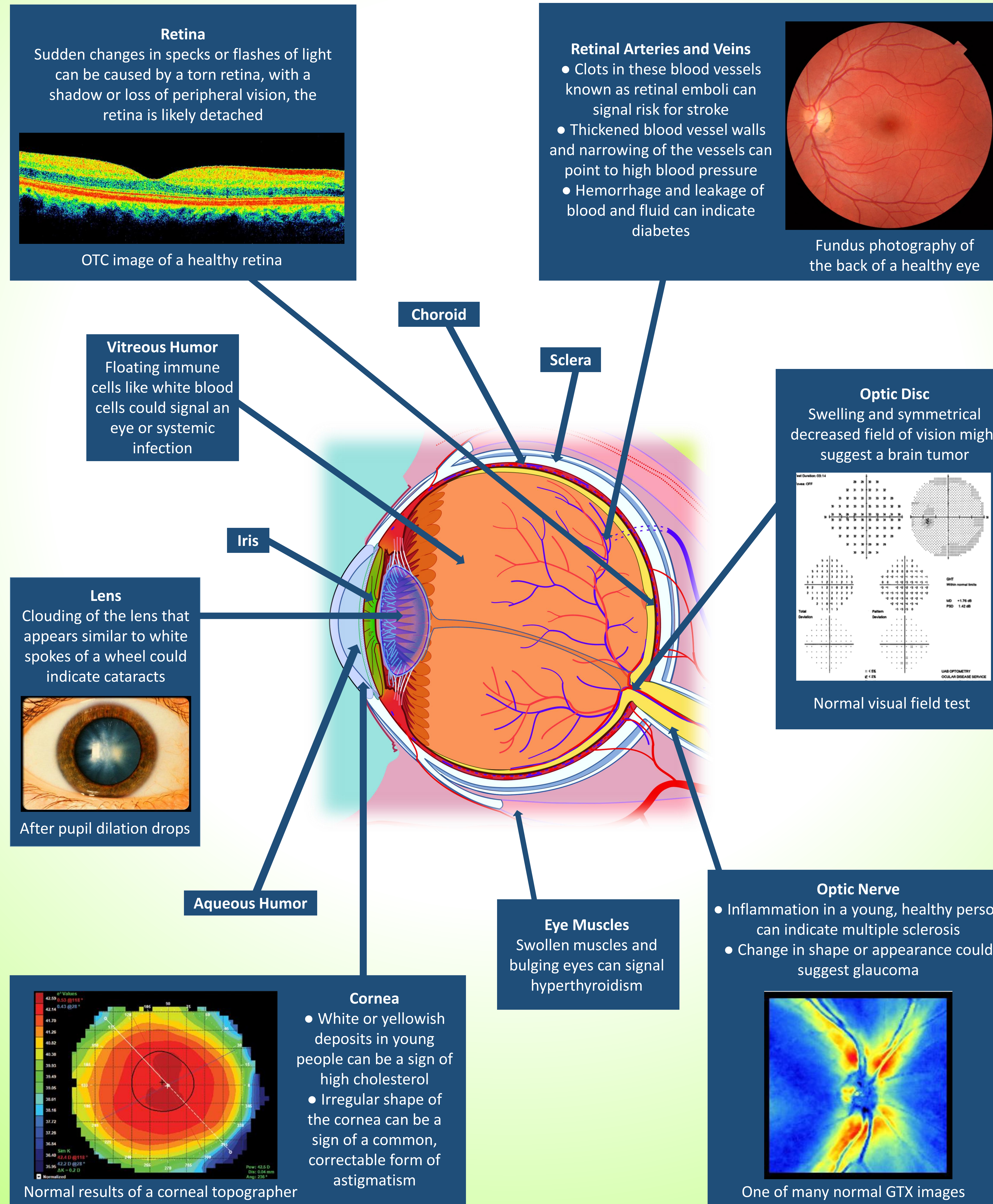
ABSTRACT

The scope of optometry has dramatically changed since its legal development in the 1900s. It has expanded beyond vision correction by lenses to include methods for examining, diagnosing, and treating diseases of the eye, visual system, and associated structures and even identifying related systemic conditions. The purpose of this project was to determine what some of these techniques are and how they have transformed the profession of optometry. These findings illustrate what doctors of optometry do today and help predict the future of the optometry field.

HISTORY

- 1263 – First mention that lenses may be useful for the visually impaired
- 1286 – Approximately the date when the first spectacles were invented
- 1604 – Johannes Kepler defined the retina's function and proved that concave lenses correct nearsightedness (myopia) and convex lenses correct farsightedness (hyperopia)
- 1621 – Law of refraction discovered
- 1783 – First U.S. shop for optometric services opened in Philadelphia
- 1784 – Split bifocal lenses were invented by Benjamin Franklin
- 1798 – John Dalton described color blindness
- 1801 – Astigmatism was discovered and the first visual field was mapped
- 1843 – First trial lens case was invented to determine lens prescription
- 1851 – Hermann von Helmholtz invented the ophthalmoscope and first saw the interior of the living eye
- 1862 – Eye chart was created to measure visual acuity
- 1864 – Norms and principle of lens prescription were established
- 1872 – Beginnings of the first college of optometry in Illinois
- 1888 – First successful glass contact lenses were made
- 1895 – Charles F. Prentice was threatened with jail time for charging a fee for an eye exam
- 1901 – First state law passed recognizing and regulating the practice of optometry in Minnesota (All states had optometry laws by 1921)
- 1919 – Fred Baker of Texas was arrested for fitting a pair of eye glasses and charged for practicing medicine without a license
- 1923 – First Doctor of Optometry degree was awarded from Pennsylvania College of Optometry
- 1928 – Introduction of the routine examination concept and first state law passed in New York allowing only graduates of universities' schools of optometry to take the state board examination thereby starting the end of the apprenticeship licensure system
- 1938 – Plastic contact lenses were introduced
- 1952 – First National Board exam was given to achieve licensure
- 1971 – First state law passed authorizing optometrists to use ophthalmic drugs for diagnostic purposes (DPA) in Rhode Island (All states had DPA laws by 1989). Before this law, optometrists were not permitted to put dilating drops in their patients' eyes.
- 1976 – First state law passed authorizing optometrists to use therapeutic drugs (TPA) in West Virginia (All states has TPA laws by 1998)
- 1981 – Medicare begins covering some optometric procedures
- 1998 – First state law passed authorizing the use of lasers by optometrists for certain purposes in Oklahoma (3 states now)
- 2010 – Affordable Care Act passed, covering annual eye exams for all children under the age of 18 and giving affordable access to eye care for millions more

MAJOR ADVANCEMENTS



LIMITATIONS

Though the scope of optometry has been expanding since its development, current boundaries are expected to limit its expansion in certain directions. There are additional health care professionals that are also concerned with eye and vision care, including opticians and ophthalmologists. Opticians are responsible for fitting and dispensing corrective appliances, including contact lenses, spectacle lenses, low vision aids, or ophthalmic prosthetics. Optometrists are trained and permitted to perform these very same tasks; however, opticians might be considered experts in this area due to their extensive experience and commitment to these duties. Ophthalmologists are medical doctors who specialize in medical and surgical eye and vision care. Unlike optometrists, they are capable of caring for all eye conditions, but typically focus on performing medical and surgical procedures related to the eye. Optometrists are not permitted now or predicted to perform surgery in an operating room, which is why they are considered primary eye care providers. Typically they can provide these primary eye care services with more familiarity and at a lower cost than ophthalmologists.

CONCLUSIONS

Major advancements in research, tools, technology, and pharmacology have allowed optometrists to expand their scope of practice in dramatic ways. Optometrists can now examine, diagnose, monitor, and treat many diseases of the eye and its related structures, which is far beyond vision correction through lenses alone. Optometrists have also become an integral part of the diagnosis and management of various systemic diseases since many individuals have signs and symptoms that manifest in the eyes. This requires optometrists to communicate with other health care professionals to provide the best care for their patients. These breakthroughs are expected to continue since there is high demand for optometrists and their expertise in primary eye care, especially in community health centers due to the public health care push towards integrated medicine. The aging population and the expectation that the number of ophthalmologists will decrease in years to come also increases the demand for optometrists. This is why colleges of optometry are teaching techniques to their students that are beyond the current scope of practice, so they graduate prepared for this growing field. Current optometrists are expected to participate in continuing education credits to learn about the latest innovations and adopt them as standards of practice if they prove themselves to be viable and are approved by legislation. The expanding scope of optometry has improved the care that optometrists can provide, therefore enhancing vision in their patients and ultimately increasing their patients' quality of life.

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