

New treatment for common incurable eye condition

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Patient-reported results of a novel treatment for pterygium and pinguecula, a common incurable eye condition presented at ARVO's Israel Chapter national meeting. The treatment utilizes the well-known cardiovascular drug dipyridamole in eye drop form. Dipyridamole has been in clinical use for 55 years, and is now being repurposed for treating intractable eye conditions such as pterygium, pinguecula and severe dry eye.

At the Israeli Society for Vision and Eye Research (ISVER) conference on March 10, the MedInsight Research Institute and Center for Drug Repurposing at Ariel University presented the latest findings on positive user-reported outcomes of the repurposed drug dipyridamole in treating pterygium and related dry-eye symptoms.

Dipyridamole is a cardiovascular drug, used for the past 55 years for treating angina and preventing stroke. It also has wide applicability for eye disorders, having been researched for various eye ailments over the past four decades, including diabetic retinopathy, ocular hypertension and retinal hemorrhage. In 2014, MedInsight published the first case report of a pterygium patient being successfully treated with dipyridamole eye drops.

Pterygium, or Surfer's Eye, is a benign growth that affects 10% of the population worldwide. It is more prevalent with older age. An early-stage pterygium is known as a pinguecula, and affects 50% of the population. Besides being unsightly, pterygium and pinguecula often become

inflamed and cause dry eye. Eventually, they can completely obstruct vision.

In the findings presented at ISVER in Kfar Maccabia, Israel, researchers analyzed outcomes of dry-eye symptoms reported by patients with pterygium. Using a well-accepted survey known as the Ocular Surface Disease Index, OSDI, the researchers found that there was a maximum reduction in OSDI scores averaging 52.4% during the course of [treatment](#) for 25 patients. Some patients reported a complete resolution of symptoms. Photographic evidence showed marked antiangiogenic effects and regression of the pterygia.

"These results are very exciting," said Moshe Rogosnitzky, director of the Center for Drug Repurposing at Ariel University, who discovered this novel treatment. "Until now, the only known treatment for pterygium has been surgical removal, which involves a high recurrence rate. In addition, patients are often given topical steroids to treat their symptoms, but this can result in glaucoma. Now we have a promising potential treatment for this very difficult to treat disorder, and it appears to be not only effective, but entails only a small amount of a very safe medicine. This treatment possibility offers very distinct advantages over the existing treatment offered."

Aaron Frenkel, research coordinator for MedInsight, added that studies are currently being planned at medical centers in Israel, Europe, Turkey and India. "This [drug](#) does not yet have commercial sponsorship, so studies are taking longer to initiate since research funds are dependent on donors. We are hopeful that clinical trials will begin later this year," said Frenkel.

Provided by MedInsight Research Institute

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