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MACULAR EDEMA AS THE THIRD CAUSE OF BLINDNESS IN THE WORLD

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Abstract: Macular edema is a swelling or thickening of the macula. Macular edema is not a disease, but a symptom of a metabolic disease. It is a change in the area of the eye that is responsible for central, clear vision. There are various causes of macular edema. It is often associated with diabetes, where damaged blood vessels (capillaries) due to diabetes leak fluid, including a small amount of blood into the retina. In certain cases, they can also become permeable to proteins. This causes swelling of the retina. Other causes are: senile macular degeneration, uveitis, retinal vein occlusion, side effects of certain medications, genetic disorders such as retinitis pigmentosa. Symptoms of macular edema most often include: blurred vision, changes in color vision, image distortion (straight lines become distorted), and if it is a more advanced stage, there is also vision loss. Diagnosis is made through: visual acuity testing, Amsler grid testing, wide pupil examination, optical coherence tomography, fundus fluorescein angiography. Treatment is most often with an Anti-VEGF injection which aims to block the protein vascular endothelial growth factor which is necessary for angiogenesis. For this purpose, this therapy is applied to prevent the formation of new blood vessels, and thus to prevent the formation of fluid in the center of vision. Treatment can also be with corticosteroids if the edema is caused by inflammation. Therapy also includes laser treatment to prevent bleeding from the retinal capillaries. The goal is to stabilize vision. Vitrectomy is performed in order to retract the vitreous body so that the macula can return to its normal position. Sometimes macular edema can cause an increase in intraocular pressure which is also called glaucoma. In such a case, drops to reduce eye pressure are additionally prescribed in combination with other therapy.

Keywords: Macular edema, Anti-VEGF, treatment

МАКУЛАРЕН ЕДЕМ КАКО ТРЕТА ПРИЧИНА ЗА СЛЕПИЛО ВО СВЕТОТ

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Анастракт: Макуларниот едем претставува оток или здебелување на макулата. Макуларниот едем не е болест, туку претставува симптом за некоја метаболна болест. Станува збор за промена во пределот на окото кој е одговорен за централен, јасен вид. Постојат различни причини за појава на макуларниот едем. Често се поврзува со дијабетесот, каде оштетените крвни садови (капилари) поради дијабетесот пропуштаат течност, вклучувајќи и мала количина на крв во мрежницата. Во одредени случаи може да станат пропустливи и за протеини. На тој начин настанува оток на мрежницата. Останати причини се: сенилна макуларна дегенерација, увеитис, оклузија на ретиналната вена, нус појави од одредени лекови, генетски пореметувања пр. Ретинитис пигментоза. Симптоми на едем на макулата најчесто вклучуваат: замаглен вид, промена на колорен вид, дисторзија на слика (правите линии се искривуваат), а доколку станува збор за понапреднат стадиум има и губиток на видот. Дијагнозата се поставува преку: тестирање на видна острина, тестирање со Амслерова решетка, преглед во широка зеница, оптичка кохерентна томографија, фундус флуоресценска ангиографија. Лекувањето е најчесто со Анти –ВЕГФ инјекција која има за цел да ги блокира протеинот васкуларен ендотелијален фактор на раст кој е неопходен за ангиогенезата. За таа цел се применува оваа терапија, за да се спречи создавањето на нови крвни садови, а со тоа и да се спречи создавањето на течност во центарот за вид. Лечењето може да биде и со кортикостероиди доколку едемот е предизвикат од воспаление. Во терапија исто така спаѓа и ласерско лечење како би се спречило крварење од калипарите во мрежницата. Целта е да се стабилизира видот. Витректомија се прави со цел да се повлече стаклестото тело за да може макулата да се врати во нормална положба. Понекогаш макуларниот едем може да предизвика покачување на интраокуларниот притисок кој уште се нарекува глауком. Во таков случај дополнително се препишуваат капки за намалување на очниот притисок во комбинација со другата терапија.

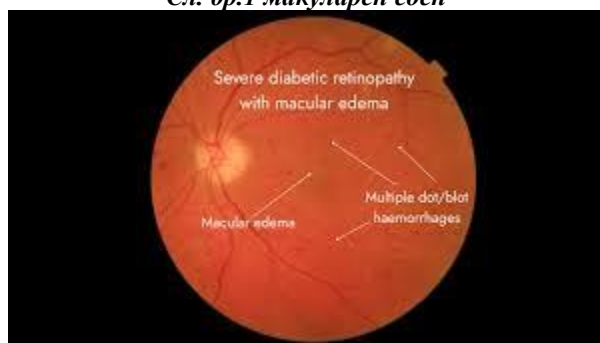
Клучни зборови: Макуларен едем, Анти- ВЕГФ, третман

1. ВОВЕД

Макуларниот едем настанува кога течност се насобира во макулата и формира оток, поради оштетување на крвните садови(капиларите). Макулата е мало централно подрачје кое го претставува центарот за јасен вид. Одговорна е за гледање во боја и фини детали. Факторите за појава на макуларен едем се многубројни. Најчесто е последица од дијабетес, каде што освен пропуштање на течност од страната на оштетените крвни капилари, понекогаш се пропушта и крв и протеини. Другите причини за макуларен едем се:

1. AMD- (сенилна макуларна дегенерација)
2. Ретинитис пигментоза
3. Увеитис
4. Оклузија на ретинална вена
5. Очни операции
6. Одредени лекови

Сл. бр.1 макуларен едем



Извор <https://www.retinalmd.com/retina-conditions/diabetic-macular-edema>

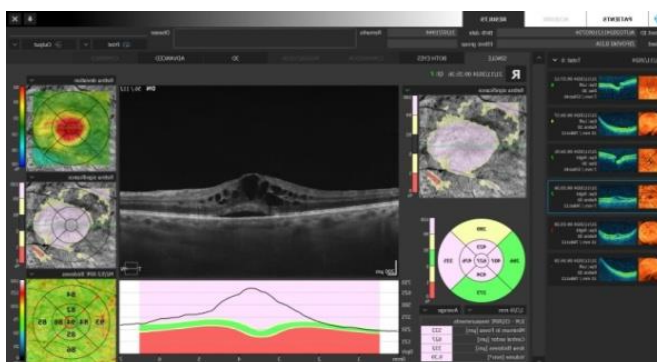
2. ЦЕЛ НА ТРУДОТ

Целта на овој труд е исходот на анти ВЕГФ терапијата на макуларниот едем, стабилноста на болеста, промени во макулата претставени преку промени на ОЦТ кај пациенти дијагностицирани при Клиничка Болница- Штип. И секако една од главните причини да се напише овој труд е важноста од раното дијагностицирање на макуларниот едем и редовните офталмолошки контроли.

3. МЕТОДИ И МАТЕРИЈАЛИ

При подготовка на овој труд пристапиме кон користење на оцт- снимки направени во Клиничка болница- Штип. Од добиените резултати ги избравме оние за кои што сметавме дека се најрелевантни за прикажување на оваа стогојба односно макуларен едем.

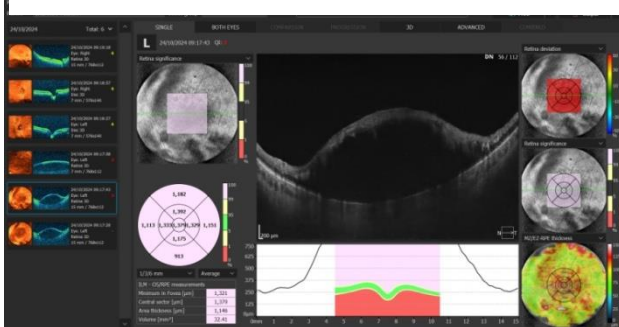
Сл.бр.2 цистоиден макуларен едем



Извор: истражувања на авторот

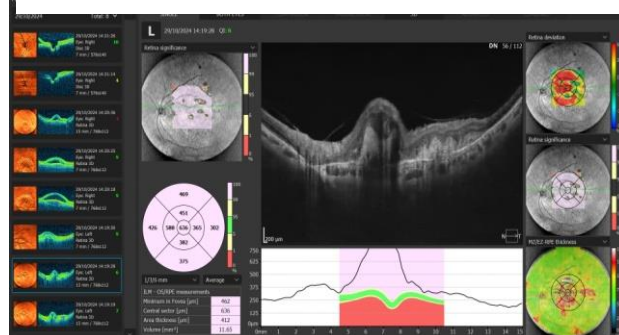
4. РЕЗУЛТАТИ И ДИСКУСИЈА

Сл.бр.3 макуларен едем кај дијабетичар



Извор: истражувања на авторот

Сл.бр 4 макуларен едем кај долгогодишен дијабетичар



Извор: истражувања на авторот

Редовните офталмолошки контроли посебно на дијабетичарите се од суштинско знаење за раната дијагноза на макуларниот едем. Анти ВЕГФ терапијата е ефикасно во неговото лекување, сепак многу е важно да се открие причината за неговата појава, бидејќи како што спомнавме тоа не е болест туку симптом за метаболна болест. Доколку не се отпочне со терапија и доколку не се открие на време, предизвикува нагло губење на видот и не случајно претставува трета причина на слепило на светско ниво.

5. ЗАКЛУЧОК

Со вкупно 1800 направени оцт снимки во период од 2023-2024 година, од кои 1000 се жени, а 800 се мажи, макуларен едем е дијагностициран кај 650 од нив во тој период. Преку овој труд објаснивме за појавата на макуларниот едем и како тој е причина за слепило на трето место на светско ниво и добрата прогноза благодарение на анти-ВЕГФ терапијата. Неговите фактори за појава, симптоми кои што ги предизвикува, дијагностика софистицирана и секако терапијата зависно од причината бидејќи како што објаснивме во трудот, макуларниот едем не треба секогаш да се поврзува само со дијабетесот- постојат и други причини од кои што може да се појави.

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