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BERLIN EDEMA: ABOUT A CASE

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Abstract: While smell is the sense organ that through smell makes us remember lived scenes or people, vision is the organ that puts us in contact with the external environment, the one that allows us to move around an area, carry out tasks, ocular traumatisms represent an expense in public health due to the disability that it produces, in addition to making it impossible for the affected person to carry out their tasks on a regular basis, despite the fact that the group has the idea that consultations for ocular traumatisms are not so frequent, they represent a high rate of consultations in emergency areas. The WHO states that approximately 55 million of these ocular injuries worldwide restrict daily activities, of these approximately 750,000 require hospitalization, this research carried out the search for information according to the methodology of systematic review bibliography following the search for keywords : macular edema, ocular trauma, Berlin edema, optimal coherence tomography, this study aimed to describe the case of a patient with Berlin edema after ocular trauma.

INTRODUCTION

Mieles Velásquez, C. (2023) Vision is the sense that puts us in contact with the environment, manifesting itself before it, resulting in the need to have good vision to be able to carry out tasks independently on a daily basis.

Ocular trauma is defined as any injury that originates from the damage of a mechanical agent, which causes tissue damage, compromising the function of vision. Díaz -Mendoza JJ (2023) these agents refer to chemical, physical, bruises that are due to both direct and indirect blows, traumatisms occupy an important position in ophthalmological consultations, the history of traumatisms goes back centuries, in the heave de Ebers already dealt with these in their reports, due to the presence of intraocular foreign bodies, reporting as an etiological agent the trades of work in architectural constructions of the Pharaonic era, during the industrial era cases of ocular trauma continued to be reported. Maricely Frómeta- Ávila (2020) In humans, the eye constitutes 0.1% of the total surface, however it is one of the means of interaction with the outside, so its loss is a stressful situation, especially when an accident occurs. ocular trauma that occurs suddenly and unexpectedly.

Rachel R. Kabunga (2022) edema is the thickening of the macula that occurs abnormally due to excess fluid in the extracellular space of the retina, it is the result of abnormal permeability of retinal vascularization and rupture of the blood-retinal barrier that is measured by vascular endothelial growth factors and other cytokines, macular edema is caused by a variety of ophthalmologic conditions such as diabetic retinopathy, retinal vein occlusion, uveitis, and pseudophakia, macular edema from diabetes is the most common cause, a global prevalence of 7.48 is estimated.

Fermín Silva Cayatopa (2020) Commotio retinae occurs after closed eye trauma, and is characterized by a gray-white retinal coloration that occurs transiently and leads to a decrease in corrected visual acuity, it can be confined to the macula, or affect areas of the peripheral retina. Alvaro Acosta - Viera (2023) by means of optical coherence tomography, which is an imaging instrument by which structural damage to the retina can be visualized by infrared interferometry in retinal involvement as it happens in the commotio retinae, serving as an aid for your diagnosis

Alvaro Acosta - Viera (2023) ocular trauma caused by mechanical mechanisms as well as kickback lead to local type modifications, Berlin described it with the term of commotio

retinae to contextualize the opacity of the retina associated with a blunt trauma of the eye, this anomaly can involve both the peripheral retina and the posterior pole, the latter is the so-called Berlin edema.

Jorge, Rassi, Luiz, Nascimento, & Freitas (2020) for these authors, ophthalmological emergencies are the primary cause of morbidities in society, they are responsible for a great demand for consultations in ophthalmology services, around 55 million of these Eye injuries are restrictive of activities according to the WHO, and of these around 750,000 need hospitalization, Diaz et.al (2019) these injuries can range from simple foreign body trauma to extensive injuries or bursting of the eyeball.

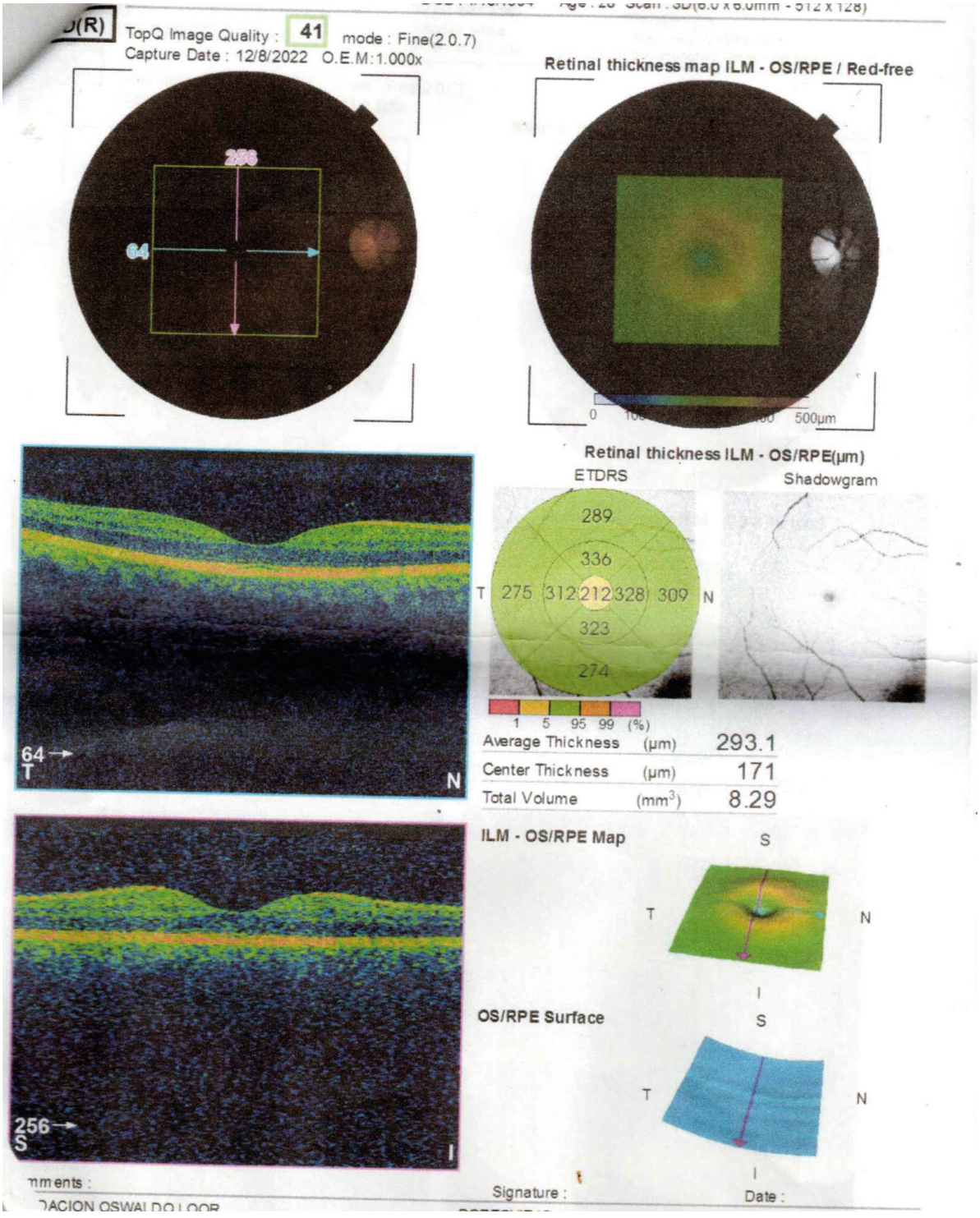
The objective of this research is to describe the case of a patient with Berlin edema after an ocular trauma.

METHODOLOGY

For this case study, an information search was carried out based on exploratory systematic review methodology criteria. Spotted Garabito (2009) from studies carried out on. This search was carried out through Dialnet, Redalyc, Lilacs, Google Scholar, using the keywords: mentioned above, this collection was not limited to geographical location, studies in English and Spanish were used, from this investigation 49,615 articles on the subject were obtained. theme chosen to carry out the theoretical foundation of the case, making a selection of 8 articles of primary studies that contain in their keywords those related to the search, the notes to the editor, postgraduate research and studies superior to 5 years, in the search, information about the author and year of publication was outlined, Guirao-goris (2014), the variables chosen were. Bevazizumab, ocular trauma, Berlin edema, macular edema, optical coherence tomography. The ethical requirements were met in a documentary investigation, copyrights were protected, and the correct citation of the document was made according to APA standards.

RESULTS

A 28-year-old patient comes to the service on December 5, 2022 due to decreased visual acuity secondary to an ocular trauma caused by a blow with a tree branch. At the time of the evaluation, he presented visual acuity in the Right Eye: 20/ twenty; Left Eye: count fingers at 1 meter, using Pin Hold correction in Left Eye: hand movements, with Intraocular Pressure: in Right and Left Eye: 10mm Hg, the pupil was in the Right Eye: 3 millimeters, and in the Left Eye: it was dilated, clear cornea, brown iris, an excavation of 0.4 was observed in the fundus, in the Left Eye bleeding and macular edema were visualized. Bronax is indicated, and a macular Optical Coherence Tomography is indicated, an Optical Coherence Tomography was performed on December 8, in addition to retinal fundus photos, in the Left Eye it is observed not round, arched, with a hypopigmented area with circumscribed hyperpigmentation in ¾ of the distance, and macular hyperpigmented area in 1/3 of the distance, he came for control a month later, on December 5, with visual acuity in the Right Eye: 20/20, in the Left Eye: 20/400, with Pin Hold correction: an improvement in visual acuity of 20/150 is made, and an appointment is made at 15 days, 'the patient does not attend the consultation, at 4 months, on June 20, he attends the consultation and is Bevacizumab application program in the left eye, the application of the `first dose is carried out without complications, on June 30, under local anesthesia, he goes to the control of the month, the visual acuity in the left eye is 20/200, clear cornea is observed, brown iris, no ocular hemorrhage is observed, the second dose is scheduled, on July 20, 2022 he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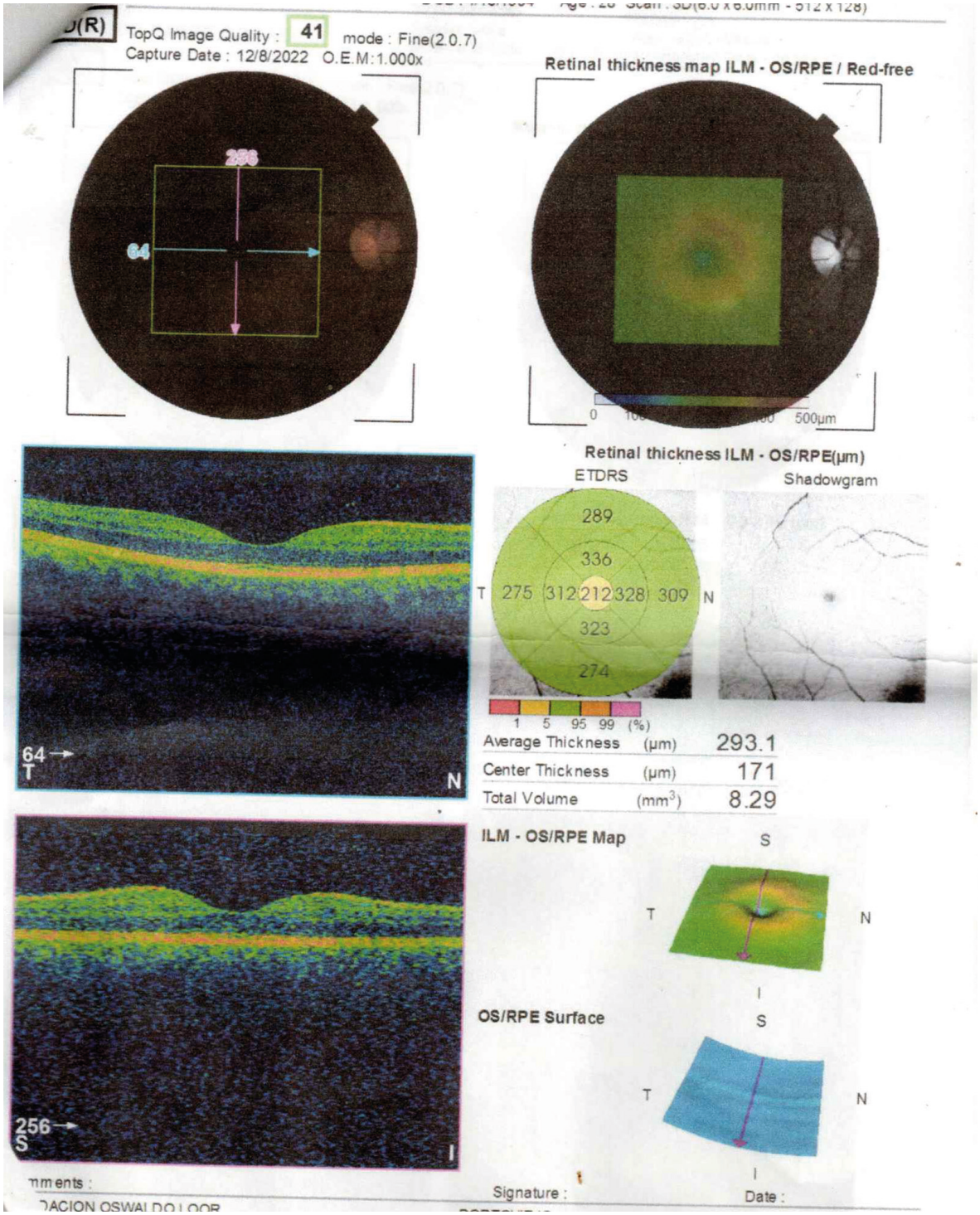
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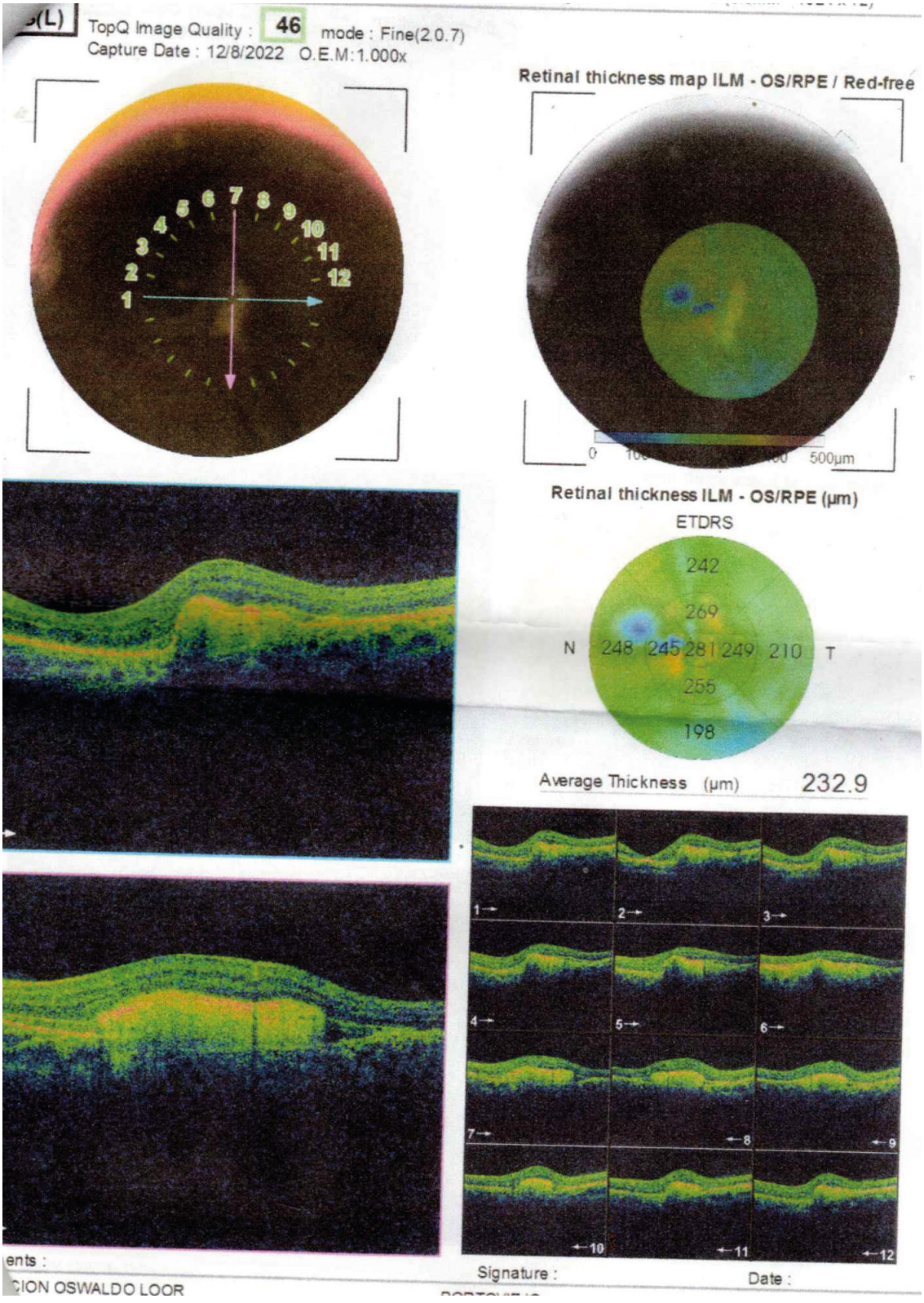

Figure 1. Macular Optical Coherence Tomography Images

attends the application of the second dose, at the control of one month the visual acuity is 20/20 in the right eye, 20/50 - 1 in Left eye, presented visualization improvement, the patient was discharged.

DISCUSSION

According to what has been reviewed in the bibliography, ophthalmological accidents occur more frequently than is believed, there is a lack of education of patients who present episodes of ocular trauma by not attending the consultation at the time of the episode., when the pain is intense, or there is a lot of discomfort, allowing months to pass before the consultation, waiting for the discomfort to resolve itself, when the pain becomes unbearable is when it goes to care, the cases evolve to more chronic pathologies, in addition to neglect in compliance with treatment and controls, causing the condition to exacerbate the Institution to which the patient attended, patients with cases of foreign bodies in the eyeball, traumatisms, burns, it is considered that there is little health education on the urgency of going to a health center with personnel trained to deal with the urgency promptly and assertively.

CONCLUSIONS

According to what was investigated, ocular traumatisms are frequently consulted in the emergencies of health homes, more common, these traumatisms usually derive in more serious ocular problems since the ocular area is a susceptible, unprotected and vulnerable area, the lack of education, that the patient does not go promptly to the consultation leads to serious ocular consequences, awareness about the promptness of going to the ophthalmological consultation is an important basis to prevent the consequences derived from the postponement of health care, the ministry of health must promoting campaigns aimed at raising awareness, education campaigns, and health promotion and prevention, casualties in the workplace, and visual impairment, is a public health problem that leads to economic charges for the State.

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