Coll. Antropol. **32** (2008) Suppl. 2: 45–46 Original scientific paper

# Dental Inflammation and Central Retinitis – It Is Important to Protect the Retina from the Harmful Sunlight

Tanja Šepić-Bilić<sup>1</sup>, Iva Zeneral-Žuža<sup>2</sup>, Zvjezdana Alpeza-Dunato<sup>3</sup>, Sanja Njirić<sup>4</sup> and Božidar Vojniković<sup>4</sup>

- <sup>1</sup> Department of Otorhinolaryngology-Audiology, University Hospital »Rijeka«, Rijeka, Croatia
- <sup>2</sup> Polyclinic »Dr. Branko Žuža«, Rijeka, Croatia
- <sup>3</sup> Department of Ophthalmology, University Hospital »Rijeka«, Rijeka, Croatia
- <sup>4</sup> Daily Eye Clinic »Dr. Božo Vojniković«, Rijeka, Croatia

#### ABSTRACT

During 3-year study of 73 patients with dental inflammation, sinusitis, otitis and 5 cases with granuloma, in 9 cases we observed the development of central retinitis. All patients were medicated with the same antibiotics and parabulbar depo of Prednisolonacetate. To 50% of these patients, we suggested eye protection with Yellow Medical filters during two months. In the first group with medication we observed better vision in 69%, but in the second group with eye protection with Yellow Medical filters we observed normalization of vision in 100%.

**Key words:** dental inflammation, central retinitis, UV and yellow filter protection

### Introduction

It is interesting that in literature this problem about correlation of dental infection and central retinitis is rarely presented. Probably the problem is in bad dental sanation. In our practice we suggest good collaboration between dentists, otolaryngologists and ophthalmologists.

#### **Materials and Methods**

During three years, 73 patients with dental inflamation, sinusitis, otitis and 5 patients with dental granuloma were examined at the Ophthalmology Department, because of possibility of central retinitis. In all patients we examined the visual acuity, performed visual field examination, anterior segment biomicroscopy and fundus analyses. All patients were treated with antibiotics /individual treatment/, parabulbar depo of Prednisolonacetate /one times daily with 5.0 mg during one week/, and 50% of all patients were protected with Yellow Medical filters during 2 months.

#### Results

In 13 patients we found macular edema, and in cases of dental granuloma we found in all the macular edema,

and in 2 cases retinal hemorrhage with septicemia. In the first group we observed 4 cases of iridocyclitis and in the second group only 2. Vision loss of 0.7 to 0.1 and central scotoma was found in all these patients with ophthalmic symptoms. After this treatment, in 69% of the patients we observed a better vision, smaller central scotoma and convalescence of iridocyclitis, but in the group with Medical filter protection<sup>1–3</sup> all patients were healed, except 2 patients with granuloma.

## Conclusion

We suggest a clinical collaboration between ophthalmologists, dentists and otorhinolaryngologists, because of the possibility of central retinitis in cases of dental inflammation, sinusitis and otitis.

Because of the influence of sunlight, especially the UV radiation, and damage of the retina in this disturbed condition, we suggest protection of the eyes with Medical filters in yellow color, during treatment<sup>3</sup>.

#### REFERENCES

1. OPHIR A, CHEVION M, Ophthalmic Surg, 23 (1992) 284. — 2. VOJNIKOVIĆ B, Einsteinov zakon elementarne fotokemijske reakcije ARTOL A, ALIO JL, RUIZ JM, Ophthalmic Res, 25 (1993) 172. — 3. (Veleučilište Velika Gorica, Zagreb, 2005).

B.Vojniković

Eye Polyclinic »Dr B. Vojniković«, Antuna Barca 3B, 51000 Rijeka, Croatia e-mail: decv@decv.com

# UPALA ZUBA I CENTRALNI RETINITIS – VAŽNO JE ZAŠTITITI RETINU OD ŠTETNOG SUNČEVOG SVETLA

#### SAŽETAK

Dugogodišnjim iskustvom i stručnom suradnjom između oftalmologa i stomatologa preporučuje se da od strane oftalmologa treba svakog pacijenta sa upalnim procesom prednjeg i stražnjeg segmenta (iridocyclitis, uveitis anterior et postrior, episcleritis, retinitis centralis) uputi stomatologu zbog mogućeg dentalnog žarišta (osobito »mrtvi zub«), a isto tako od strane stomatologa potrebno je uputiti oftalmologu svaki upalni dentalni proces kad pacijent izjavljuje da ime smetnje vida (zamućen, neoštar vid). Sa terapeutskog aspekta preporučuje se pored antibiotika širokog spektra i parabulbarni depo Prednisoloacetat, kroz tjedan dana 1 x dnevno po 10 mg. Autori posebno ističu važnost optičke zaštite takovih bolesnika u toku trajanja procesa, sa medicinskim filterom valne dužine od 550–600 nm (žuto-zeleno područje). Takva zaštita je osobito važna u godišnjim razdobljima od svibnja do listopada, kada je pojačana insolacija.