Development and Progression of Age-Related Macular Degeneration after Cataract Surgery – In the Near Future It Could Become a Forensic Medicine Problem

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ABSTRACT

After testing all types of implanted IOLs with spectrophotometer, author estimated that filtering of sun light is not successful, leaving open the possibility of development of AMD after cataract surgery. This is especially serious problem in implantation of IOLs to children. Until recently, implantation of intraocular lenses without or with inappropriate UV protection was not considered a serious problem. Nowadays we know that, especially in children, such treatment is no longer acceptable and results in AMD. It is only a matter of time when the first lawsuit will appear on it. We suggest obligatory eye protection after cataract surgery (aphakic and pseudophakic eyes) with Medical filters (Yellow-Green: 550–600 nm) and regular ophthalmic controls.

Key words: age-related-macular degeneration, cataract surgery, forensic medicine

Introduction

There is a very important question, what happens with the retina after cataract extraction?

In very recent papers (»Vision 2020«, Dubrovnik, 2008) author estimated in very serious study of 1350 pseudophacic patients, developement and progression of the age-related macular degeneration (AMD) in 27%, during the period of 3 months to 2 years after cataract extraction.

After testing all types of implanted IOLs with spectrophotometer, author estimated that filtering of sun light is not successful, leaving open the possibility of development of AMD in such a high percent. This is especially serious problem in implantation of IOLs to children.

Forensic Medicine Aspect

No medication/treatment is perfect, for surgeon. Besides healing and positive effects there are always some side effects which are not welcome, causing sometimes even serious and permanent consequences on health.

However, they are not the reason to stop using/practicing that medication/treatment in healing people. The moment when such medication/treatment is not to be used/practiced and becomes malpractice is that when besides awareness of the problem (side-effect), other more appropriate medication/treatment exists and is widely accepted by medical professionals involved. Then it becomes a forensic medicine problem and object to expertise.

Development and progression of age-related macular degeneration (AMD) after cataract surgery will soon become such an example. Until recently, implantation of intraocular lenses without or with inappropriate UV protection was not considered a serious problem. Nowadays we know that, especially in children, such treatment is no longer acceptable and results in AMD. It is only a matter of time when the first lawsuit will appear on it. Therefore, this problem must be taken with seriousness and caution now, to save vision of these patients, prevent the lawsuits and minimize potential financial losses in the future.

Conclusion

We suggest obligatory eye protection after cataract surgery (aphakic and pseudophakic eyes) with Medical filters (Yellow-Green: 550-600 nm)¹⁻³ and regular ophthalmic controls.

REFERENCES

1. HENDERSON ST, Daylight and its spectrum (Adam Hilger, Bristol, 1997). — 2. VOJNIKOVIĆ B, Einsteinov zakon elementarne fotoke-

mijske reakcije (Veleučilište Velika Gorica, Zagreb, 20005). — 3. VOJNI-KOVIC B, VOJNIKOVIC D, BRCIC L, Coll Antropol, 31 (2007) 29.

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RAZVOJ I PROGRESIJA SENILNE MAKULARNE DEGENERACIJE NAKON OPERACIJE KATARAKTE – U BLISKOJ BUDUĆNOSTI TO BI MOGAO POSTATI SUDSKO-MEDICINSKI PROBLEM

SAŽETAK

Nakon testiranja svih tipova implantiranih leća spektrofotometrom, autor je procijenio da filtriranje sunčevih zraka nije uspješno, ostavljajući otvorenu mogućnost razvoja senilne makularne degeneracije nakon operacije katarakte. Ovo je posebno ozbiljan problem kod implantacija leća djeci. Donedavno implantacija intraokularnih leća bez ili s neadekvatnom UV zaštitom nije smatran ozbiljnim problemom. Danas znamo da, posebice kod djece, takvo liječenje više nije prihvatljivo i rezultira razvojem senilne makularne degeneracije. Samo je pitanje vremena kada će se pojaviti prva sudska tužba vezano uz navedeni problem. Mi predlažemo obvezatnu zaštitu očiju nakon operacije katarakte (afakija ili poseudofakija) medicinskim filtrima (Žuto-Zeleno: 550–600 nm) i redovite oftalmološke kontrole.