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شبكة المعلومات الجامعية
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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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**Study of Efficacy and Toxicity of
Intravitreal Ciprofloxacin in
Experimentally induced Staphylococcus
epidermidis Endophthalmitis in rabbits**

Thesis

Submitted to the Faculty of Medicine,
University of Alexandria,
In partial fulfillment of the requirements
of the degree of

Master of Ophthalmology

By

Walid Mohamed Abdalla

M.B.B.Ch (Alexandria)



Ophthalmology Department

Faculty of Medicine

University of Alexandria

2007

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*To my
Parents*



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INTRODUCTION

INTRODUCTION

Infectious endophthalmitis is a condition in which there is microbial invasion and inflammation of one or more coats of the eye and its interior cavities. Clinically, the presence of vitritis is necessary for the clinical suspicion of the occurrence of an infectious endophthalmitis. Although the most common causative agents of infectious endophthalmitis are bacteria, important pathogens may include fungi, parasites, and viruses.⁽¹⁾

From a diagnostic and therapeutic point of view, it is convenient to classify endophthalmitis according to the manner of spread of organism to the eye as well as on the time course of the disease. Exogenous endophthalmitis occurs when micro-organisms invade the eye, usually through a break in the outer wall secondary to surgical intervention or to trauma. Organisms may also spread to the eye from a distant body site by means of the blood stream. Most cases of infectious endophthalmitis occur after intraocular surgery, where more than 90% of these cases are caused by bacteria.⁽¹⁾ Classifying the time course of the disease as acute, subacute, or delayed onset is helpful in selecting therapy for specific bacterial pathogens. The visual prognosis in many cases of infectious endophthalmitis is related to prompt diagnosis and initiation of therapy.⁽¹⁾

Postoperative infectious endophthalmitis remains a feared complication of intraocular surgery.⁽²⁾ Endophthalmitis has the potential to occur after any type of ocular surgery.⁽³⁾ As cataract extraction comprises the majority of ocular surgery, it is not surprising that 80-90% of endophthalmitis cases occur after cataract surgery.⁽⁴⁾ The association of endophthalmitis with conjunctival filtering blebs is also well known.⁽⁵⁾ Cases of endophthalmitis have been also described following penetrating keratoplasty,⁽⁶⁾ strabismus,⁽⁷⁾ and posterior segment surgery (scleral buckling procedures, pneumatic retinopexy, and pars plana vitrectomy).⁽⁵⁾

The poor prognosis of eyes with endophthalmitis is a result of the action of two destructive forces. First, bacterial infection involves both bacterial invasion and secretion of toxins capable of massive destruction. Second, the host defense involves the build up of white blood cells, which also produce proteolytic enzymes capable of inflicting damage to the eye.⁽⁸⁾

Incidence of Infectious Endophthalmitis:

At the beginning of the 20th century, the incidence of apparent infection occurring after intraocular surgery was about 10%. After the popularization of aseptic techniques, a sharp decline occurred so that by 1950, the rate of postoperative bacterial endophthalmitis had dropped to about 1%. From then to the present, a further decline to 0.35% has