

Management of Retinoblastoma with Vitreous Seeds (Retrospective Study)

Thesis

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List of Abbreviations

AES	: Anterior eye segment
CEV	: Carboplatin Etoposide Vincristine
CT	: Computed tomography
EBR	: External beam radiotherapy
TCT	: Thermochemotherapy
IAC	: Intra-arterial chemotherapy
IVC	: Intravitreal chemotherapy
MRI	: Magnetic resonance imaging
OCT	: Optical coherence tomography
PCR	: Polymerase chain reaction
PEDF	: Pigment epithelium derived factor
PET	: Positron emission tomography
Rb	: Rentinoblastoma
DD	: Disc diameter
SD	: Standard deviation
US	: Ultrasonography
VEGF	: Vascular endothelial growth factor
DNA	: Deoxyribonucleic acid
RNA	: Ribonucleic acid

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Introduction

Retinoblastoma (Rb) is the most common primary ocular malignancy of childhood. There are two forms heritable and non heritable. Presentation is in the first few years of life, sometimes in the neonatal period. Early detection and prompt treatment can give cure rates up to 95% for intraocular tumors, but extraocular diseases carries a very high mortality. The diagnosis is essentially clinical and biopsy is contraindicated due to the risk of extraocular spread. (*Parulekar., 2010*)

The presence of vitreous seeds has been recognized as a major risk factor for eye survival. Vitreous seeding is characterized by presence of tumor cells in the vitreous cavity. It may also appear during the treatment course (secondary) in eyes devoid of vitreous seeds at diagnosis. A possible iatrogenic component is present which is laser thermotherapy used for treatment. Another cause of secondary vitreous involvement is the sudden vitreous dispersion of large tumors shortly after the initiation of chemotherapy due to a necrotic disruption of the internal limiting membrane. (*Gombos et al., 2006*)