

List of Contents

List of Abbreviations.....	III
List of figures	VII
Introduction	IX
1. Anatomy	1
1. Structure and function of the human retina.....	1
2. Structure and function of the choroid	v
2. Pathology	1
1. Dry AMD	1
2. Exudative AMD	14
3. Imaging techniques	19
1. Dry AMD	19
2. Exudative AMD	22
4. Treatment	33
A. dry AMD	33
B. exudative AMD	34
1. Laser photocoagulation.....	35
2. Photodynamic therapy using verteporfin	36
3. Pharmacological approaches to AMD	37
4. Surgical management of AMD	44
5. Stem cells general concepts	46
6. Potential stem cell sources.....	52
1 embryonic stem cells.....	52
2 fetal stem cells.....	52
3 umbilical cord blood derived stem cells1	53
4 Bone marrow mesenchymal stem cells	53
5 neural stem cells	55
6 retinal stem cells	56
7 Limbal stem cells	56
7. Differentiation of Embryonic Stem cells	57

8. Stem cells therapy	59
1 Stem cells therapy for AMD	59
2 Functional assessment of cell-based therapies.....	70
9. Problems with stem cells therapy	71
10. Stem cells and immunity.....	73
11. Challenges in using stem cells for eye disease	75
Summary	81
References	83