

OFF LICENCE INTRAVITREAL FLUOCINOLONE ACETONIDE FOR TREATMENT OF RETINAL VEIN OCCLUSION MACULAR OEDEMA

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Background

RETINAL VEIN OCCLUSION (RVO) IS A COMMON CAUSE OF SUDDEN LOSS OF VISION. OCCLUSION OF THE CENTRAL OR BRANCH RETINAL VEIN CAUSING SUBSEQUENT MACULAR OEDEMA. CURRENT TREATMENTS INCLUDE INTRAVITREAL ANTI-VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF) INJECTIONS OR DEXAMETHASONE IMPLANTS.

A SINGLE CASE REPORT BY COELHO ET AL. REPORTED THE USE OF A FLUOCINOLONE ACETATE (FA) IMPLANT IN THEIR PATIENT WITH NON-ISCHAEMIC RVO. AFTER A 12 MONTH FOLLOW UP PERIOD, THE AUTHORS REPORT IMPROVEMENTS IN VISUAL ACUITY (VA) AND OPTICAL COHERENCE TOMOGRAPHY (OCT). THE AUTHORS REPORT THAT THE PATIENT HAD PREVIOUSLY BEEN ON MULTIPLE REPEAT INJECTIONS OF SHORT-ACTING CORTICOSTEROIDS, WHICH YIELDED POOR IMPROVEMENTS IN VA AND SUB-FOVEAL THICKNESS REDUCTION. ONE FA IMPLANT, ON THE OTHER HAND, GAVE A CONTINUOUS AND SUSTAINED IMPROVEMENT IN VA AND OCULAR ANATOMY.

Our Case

A 72-YEAR-OLD MALE PATIENT PRESENTED WITH A LEFT HEMI-RETINAL VEIN OCCLUSION WITH MACULAR OEDEMA IN JANUARY 2013. OUR INITIAL TREATMENT WAS INTRAVITREAL DEXAMETHASONE IMPLANTS. ALTHOUGH HE SHOWED AN EXCELLENT RESPONSE, IT BECAME SHORT LIVED WITH FURTHER RETREATMENT, WITH THE EFFECT LASTING FOR 8-10 WEEKS ON AVERAGE BEFORE OEDEMA RETURNED (SEE OPPOSITE DIAGRAM). THIS NECESSITATED ADDITIONAL TREATMENT WITH NUMEROUS ANTI-VEGF INJECTIONS IN ADDITION TO TREATING ANGIOGRAPHICALLY ISCHAEMIC AREAS WITH RETINAL LASER. AT 14 MONTHS FOLLOW UP AFTER OFF LABEL USE OF FA, WE REPORT:

- VISUAL ACUITY: 6/30 BEFORE IMPLANT, TO 6/12 AFTER IMPLANT WITH PINHOLE.
- CENTRAL SUBFIELD THICKNESS (CST): AT BASELINE: 477MM; MAXIMUM PRE-FA: 555MM; IMMEDIATELY PRE-FA: 447MM; AT 14 MONTHS POST-FA: 311 MM.

Learning Points

LONGER-ACTING STEROIDS MAY BE BENEFICIAL FOR PATIENTS WHO DO NOT RESPOND FOR LONG ENOUGH TO DEXAMETHASONE IMPLANTS. IN THE LONG TERM THIS MAY TRANSLATE TO LESS INVASIVE PROCEDURES NEEDED. HOWEVER FURTHER PROSPECTIVE RESEARCH ON A LARGE COHORT IS NEEDED TO FURTHER ELUCIDATE THIS EFFECT.

DIAGRAM DEPICTING PATIENT INJECTIONS SINCE DIAGNOSIS

