Advances in CSR Treatment

This is the second issue of our journal 'Ophthalmology and Allied Sciences'. In this issue we have several good articles for the readers. A special attention needs to be drawn towards the article on Central Serous Retinopathy(CSR)[1] bysuggesting the role of anti VEGF in improvement of vision, delay in inkblot pattern of leaks on FFA and improvement in mean central macular thickness on OCT. This treatment modality could be used as alternative to laser therapy in chronic CSR.

The gold standard treatment of CSR has always been masterly inactivity as the disease is self limiting [2]. Recently the treatment options for CSR have undergone a sea change. In case the resolution does not occur in three months laser photocoagulation is the treatment of choice for well defined focal and extrafocal leaks but side effects such as permanent scotoma, laser scar enlargement and laser induced CNV occur. In addition, it does not influence the visual outcome or rate of recurrence. When the leak is foveal or diffuse, infrared micropulse laser is the treatment of choice. They may be considered first line treatment methods. The risk factors should also be tackled e.g. discontinuing exogenous steroids intake in any form.

For chronic CSR, recurrent CSR and first time CSR attack of more than three months old, apart from laser photocoagulation and micropulse diode laser photocoagulation, transpupillary thermotherapy (TTT), standard photodynamic phototherapy(PDT), and PDT with reduced dose(half to one-third), PDT with reduced fluence(decreasing laser time or power) have been tried. All these studies have been undertaken in an attempt to reduce the choriocapillary ischemia. The results have been gratifying but more studies are needed to achieve the best results with the least possible complications [3].

In the article 'Effect of intravitreal ranibizumab in CSR with ink blot type of leakage and neurosensory retinal detachment (NSD) >3 months duration', an attempt has been made to treat the patients on the hypothesis that choroidal hyperpermeability is associated with increased activity of VEGF. But higher levels of VEGF have not been detected in aqueous humour[4]. Other studies have found that anti VEGF has well established role in CNVMs secondary to CSR but its primary role in CSR needs further studies[5].

Several clinical trials have been done to observe the effects of anti corticosteroids on the basis that there is increased cortisol activity in patients of CSR which may be decreased by giving anticorticosteroid treatment. Important among anticorticosteroids are ketoconazole, mifepristone(RU-486), spironolactone and eplerenone. They have been tried but are not associated with significantly better outcome[6].

Adrenergic blockers, systemic carbonic anhydrase inhibitors, aspirin, helicobacter pylori and methotrexate have also been tried but in all these studies no conclusion could be drawn and more studies are needed [6].

Finally, the gold standard of treatment of CSR remains the masterly inactivity in majority. Further intervention in chronic CSR may be undertaken on individual case basis.

References

- Effect of intravitreal ranibizumab in CSR with ink blot type of leakage and neurosensory retinal detachment (NSD) >3 months duration. Journal Ophthalmology and Allied Sciences.
- Ross A, Ross AH, Mohamed Q. Review and update of central serous chorioretinopathy. Curr Opin Ophthalmol. 2011; 22(3): 166–73. http://dx.doi.org/ 10.1097/ICU.0b013e3283459826.
- Nicoló M, Eandi CM, Alovisi C, et al. Half-fluence versus half-dose photodynamic therapy in chronic central serous chorioretinopathy. Am J Ophthalmol. 2014; 157(5): 1033–7. http://dx.doi.org/10.1016/ j.ajo.2014.01.022.
- Lim JW, Kim MU, Shin M-C. Aqueous humor and plasma levels of vascular endothelial growth factor and interleukin-8 in patients with central serous chorioretinopathy. Retina 2010; 30(9): 1465–71.

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http://dx.doi.org/10.1097/IAE.0b013e3181d8e7fe.

 Montero JA, Ruiz-Moreno JM, Fernandez-Muñoz M. Intravitreal bevacizumab to treat choroidal neovascularization following photodynamic therapy in central serous choroidopathy. Eur J Ophthalmol. 21(4): 503–5. doi: http://dx.doi.org/ 10.5301/EJO. 2011.6290.

 Marwan A. Abouammoh, MD, Advances in the treatment of central serous chorioretinopathy.Saudi Journal of Ophthalmology. 2015; 29: 278-286. http:/ /www.saudiophthaljournal.com/article/S1319-4534(15)00023-5/pdf.

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