Diabetic Macular oedema (DMO) combined with Retinal Angiomatous Proliferation (RAP) lesions

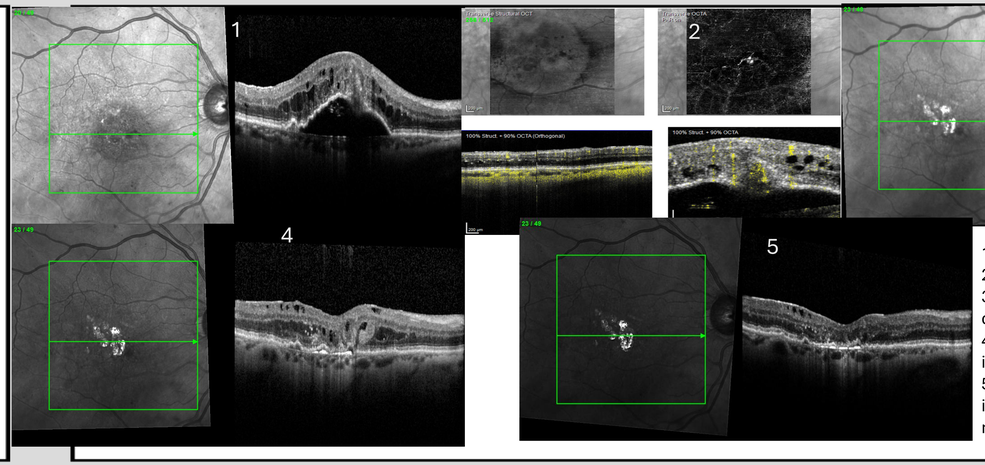
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Introduction :
RAP is now considered a well-established neovascular phenotype of AMD . Environmental risk factors such as age and arterial hypertension have been associated with the development of both RAP and typical exudative AMD, but it can be associated with Diabetic macular oedema. Differentiating between Diabetic Macular oedma (DMO) and Retinal Angiomatous Proliferation (RAP) lesions is important for several reasons related to management.

Method :
Out of the 50 RAP patients , in a retrospective observational study , all of them Caucasians , average age of 79 and 70% were females, we had three patients who had associated Type 2 diabetes mellitus and Diabetic retinopathy changes with macular changes which had a combination features of both DMO and RAP lesion.
The RAP lesion was targeted intensively with Anti-VEGF and the vascularised RPED component responded well to frequent intravitreal injections of Anti-VEGF (4 to 6 weeks) but some of the intra-retinal fluid always persisted in one patient . When the Anti-VEGF treatment was combined with intravitreal dexamethasone , the response was better with good resolution of the intra-retinal fluid.

Results :
Chi-Square Test of Independence was used to test whether there is a significant association between two categorical variables (diabetes status with diabetic macular oedema and presence of RAP lesions). Using the observed frequencies and expected frequencies , chi- square value was calculated and this was compared to a chi-square distribution table with the appropriate degrees of freedom. The corresponding p value was calculated and it was < 0.05.

Conclusion :
It is important to distinguish between a RAP lesion and DMO when they both are combined as the treatment strategies, prognosis and frequency of follow up monitoring are different .By distinguishing between DMO and RAP lesions, clinicians can provide more personalised treatment plans, improve patient outcomes, and enhance the overall management of macular changes related to diabetes mellitus combined with RAP lesions.



1. RAP lesion at Diagnosis in a patient with DMO
2. RAP lesion on OCTA at Diagnosis
3. RAP lesion and maculopathy progression despite treatment with intravitreal Anti-VEGF.
4. RAP lesion with DMO - Response 4 weeks after intravitreal Anti-VEGF
5. RAP lesion with DMO - Response 4 weeks after intravitreal Dexamethasone pellet of 700 micrograms

Conflicts of interest – None

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