Panel Discussion on ARMD

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Expert Panel

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In our clinical practice, ARMD is often seen and with myriad presentations. With advancement in imaging techniques and development of new drugs, we need to be updated and guided by the experts in field to be able to tackle the disease better.

Q.1 What minimum investigations you would like to do for every AMD patient?

CS: OCT in every case. Baseline FFA in most. OCTA & ICG on a need basis.

RN: Good 90D examination. This is something many ophthalmologists skip and directly advise tests. OCT is necessary in every wet AMD diagnosed on clinical examination. I advise OCTA for every intermediate and advanced dry AMD patients too. However, for those who do not have OCTA in their practice, look out for the double-layer sign of RPE in standard OCT. Double layer sign has a high correlation with CNVM.

NB: OCT

AM: 1st investigation to order : OCT & DFA

Investigation to consider : ICG In clinically suspected IPCV , RAP & Refractory CNV

Q.2 Where do you place the role of OCT ANGIOGRAPHY in AMD diagnosis?

CS: *Ocult CNVs where FA is inconclusive

* Pachychoroid neovasculopathy

*PCV

*CNV assoc with Mac Tel.

RN: It is not crucial in the diagnosis or management of treatable wet AMD. OCTA has a great role in specific conditions, including non-AMD CNVM, such as myopic CNVM or CSCR related CNVM.

NB: 10% of atypical presentations of AMD need OCTA for better diagnosis & for prognostication.

Also in poor responders an OCTA is important to find the reason for poorer response and to plan further management.

AM: OCTA is emerging as a rapid , non-invasive imaging modality that provide detailed structural and flow information on retinal & choroidal vasculature .We use in patients where DFA is not feasible ,contraindicated or patient is reluctant to undergo invasive tests .The use of OCTA has improved detection of CNV in challenging cases. Comparison of OCT & OCTA imaging helps to differentiate active CNV from quiescent CNV & to choose appropriate therapeutic management : Anti VEGF injection in active CNV and simple monitoring for quiescent CNV (Sensitivity of OCTA is very high in type 1

& type 2 CNV in AMD)

Q.3 How do you differentiate PCV from AMD?

CS: Clinical presentation – more exudation & hemorrhage.

OCT : Peaked Notched PEDs: Double layer Sign indicates a BVN

OCT-A : BVN often very well delineated.

ICG : Delineates polyps better.

RN: On ICG. We can talk a lot about theory on OCT features in IPCV, but there is no substitute for ICG for PCV, not even OCTA.

NB: In most cases typical clinical & OCT pictures help in diagnosis. In case of doubt an OCTA/ICG does help.

AM: The index of suspicion of PCV is higher for a younger patient presenting with symptoms and signs of Wet AMD. Clinically a reddish orange, nodular or spheroid, polyp like structure noted in PCV. Multiple lesions (with exudative maculopathy, massive sub retinal haemorrhage,PED,exudation & sub retinal fibrosis) and no drusen suggests PCV.

Multiple location surrounding the peripapillary region rather than isolated to the macula

Diagnosis of PCV is based on ICG (presence of polyp, BVN) and OCT (tall peaked, notched & multiple PED)

Q.4 Do you prescribe supplements for dry AMD?

CS: Yes

RN: No. I do not believe in them.

NB: Yes

AM: Yes I use in intermediate or advanced disease to reduce the risk of vision loss

Q.5 Which is your frontline choice of drug as intravitreal injection for Wet AMD?

CS: Ranibizumab and Aflibercept

RN: Ranibizumab

NB: Aflibercept

AM: Ranibizumab and Aflibercept

Q.6 What's your follow up schedule of patients after injection?

CS: Loading dose followed by treat & extend. Follow up can be extended from 1 month to 3 months if possible. If recalcitrant /recurrence continue monthly follow up & inject PRN.

RN: Monthly follow up until dry.

NB: One week after the first injection & then monthly. In case of severe cases a 2 weekly follow-up is advised to monitor the disease activity.

AM: Next day and then 3 weeks

Q.7 How do you find the new drug Brolucizumab in Wet AMD management?

CS: Have not used it so far. Will probably start using it in cases not responding well to frontiline molecules or in case tending to recur very rapidly after their use. There have been reports of retinal vasculitis post Brolicizumab which has limited its use as first choice drug. Once that factor is taken care of & longer duration of action of upto 16 weeks is seen in real world situation it could become frontline choice.

RN: I have limited experience. It has great drying efficacy, better than aflibercept. However, safety profile needs a careful watch.

NB: Fabulous drug with a great potential in terms of potency as well as longer action.

AM: Quite promising as I got very good results in my first 5 cases. Long follow will give us the real life picture of effectivity & safety of this new drug.

Q.8 What's the role of lasers in AMD management today in your practice?

CS: Role of lasers is very limited.

(1)Extrafocveal CNV which can be safely treated without damage to fovea.

(2)Exramacular polyps–not so rare

Usually laser treatment is combined with anti-VEGF injection.

RN: No role of thermal laser. I peform PDT in PCV, and thermal laser in extrafoveal polyp. Unfortunately, Visudyne for PDT is not available now.

NB: Extrafoveal CNVM / Extrafoveal leaking polyps in IPCV.

AM: I don't do Laser in AMD. Only is few cases of extra foveal IPCV lesion I do Laser

Q.9 When do you switch from one drug (injection) to other in Wet AMD?

CS: If there is no or minimal response after 3 injection. Important to first reconfirm, we are dealing with AMD and not something else like adult vitelliform, CSR or MacTel (without /or CNV), PCV.

We can then switch from, say Ranibizumab to Aflibercept or Vice Versa or now even Brolucizumab.

RN: After 2 injections of no response.

NB: If there is no response /poor response after 3 continuous injections.

AM: After 3 loading dose if there is sub optimal or no response I switch to other drug

Q.10Do you prefer to dry up the lesion completely or you prefer to leave some fluid?

CS: The aim is to dry up the lesion in most situations. Leaving fluid is not a preference. However in type I CNVM if some fluid persists after repeated injections, visual acuity is stable & no other sign of acitivity like fresh hemorrhage we decide to tolerate that fluid with a close follow up.

RN: Completely dry for intraretinal fluid. I leave extrafoveal subretinal fluid in the absence of intraretinal fluid. I do not treat PED without retinal fluid at this time.

NB: Dry Up as far as possible.

AM: I prefer to dry up the lesion unless & until some small amount of SRF persists after repeated anti VEGF injections.

Q.11 What are the indications of surgery in AMD in your practice?

CS: The only indication currently for surgery in AMD is large submacular hemorrhage. The procedure of choice with us is intra-vitreal TPA & Gas to displace the hemorrhage. If the hemorrhage is massive, one has to do a vitrectomy, large peripheral retinotomy & evacuation of the blood & injection of silicon oil.

RN: Submacular hemorrhage or breakthrough vitreous hemorrhage.

NB: Bilateral scarred CNVM... I do an autologous RPE transplant with scar removal in one eye.

AM: I rarely do surgery (only in massive sub retinal haemorrhage or break through bleeding I do surgery)

Good News

As per the Guidelines on Safe Ophthalmology Practices in Covid-19 Scenario issued on 28th December 2020 by Ministry of Health and Family Welfare, Government of India,

'Collection/retrieval of eye balls/Corneas from home settings is allowed with all precautions being taken to prevent spread of infection to retrieval technicians and to the recipient of corneas. Corneas may be utilised for therapeutic as well as optical purposes'

The document can be accessed on following link:

https://aios.us5.list-manage.com/track/click?u=5b1666c401fa04c2eac1d0763&id=88f9574df7&e=5403adef5e

The staff manning these entry points should ensure appropriate personal protection as entailed in guidelines already issued. (available at:

https://www.mohfw.gov.in/pdf/AdditionalguidelinesonrationaluseofPersonalProtectiv eEquipmentsettingapproachforHealthfunctionariesworkinginnonCOVIDareas.pdf

In case of a suspect or confirmed case in the premises, the protocols for attending to suspect or confirmed case and disinfection available at:

https://www.mohfw.gov.in/pdf/GuidelinesonpreventivemeasurestocontainspreadofCOVID1 9inworkplacesettings.pdf