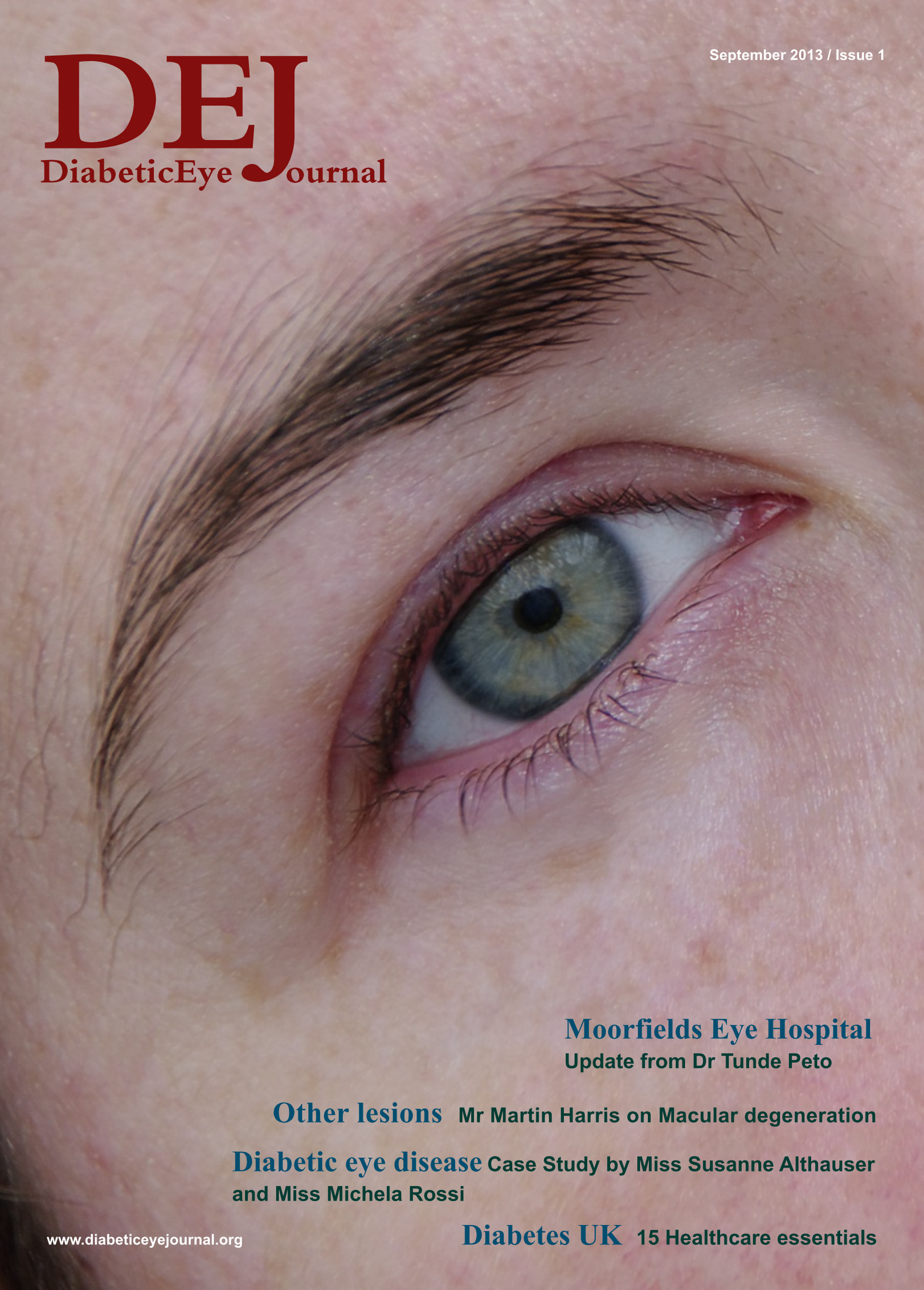
September 2013 / Issue 1

DEJ
DiabeticEye Journal



Moorfields Eye Hospital
Update from Dr Tunde Peto

Other lesions Mr Martin Harris on Macular degeneration

Diabetic eye disease Case Study by Miss Susanne Althauser and Miss Michela Rossi

Diabetes UK 15 Healthcare essentials

www.diabeticeyejournal.org

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DiabeticEyeJournal

EDITORIAL

Why Diabetic Eye Journal?

Well there is a need for it, there is a need for wider awareness about the potential damage that diabetic retinopathy can cause.
This silent disease can gradually affect people's vision eventually resulting in blindness and, because prevention is always better than the cure, we hope this Journal will contribute towards it.
But not only that, practitioners who are coming across diabetic eye disease on regular basis can use this Journal as a platform. They can share their experience, case studies, new treatments, research and development.

Our readers and community that contributes to Diabetic Eye Journal includes the diabetic population, retinal eye screening programmes, hospital eye service practicioners, opticians, optometrists, GPs, and companies behind new treatments or technologies. We hope that you will enjoy our first issue.

IN THIS ISSUE

Diabetic Eye Journal has been created by the team of NCL DES Programme, and would not materialize without special help and support of Clinical Lead Miss Susanne Althauser - Consultant Ophthalmologist RFH, Senior Retinopathy Grader Niamatullah Jalandary and Dr Surendra Upadhyay to whom goes credits for seeing it through.

COMING UP in Next issue / March 2014

Under our Other Lesions section - Ms Bola Odufuva FRCOpth, MSc Consultant Ophthalmologist and Glaucoma Lead at Royal Free London NHS Foundation Trust will talk about Glaucoma

Managing advanced diabetic eye disease - Mr. Hadi Zambarakji FRCOphth, D.M Consultant Vitreoretinal Surgeon

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13th Annual BARS Conference

Conference was held in Gosforth Park Hotel in Newcastle on the 26th & 27th September 2013. This was a return visit after a successful conference in this hotel in 2009.

Due to the hard work behind the scenes there was an interesting mixture of subjects for presentations, and first ever photographic competition with opportunity of winning an iPad.

The Royal College of Ophthalmologists Education Dept/Professional Standards have awarded BARS conference 7 CPD points - category B, which benefits to a medical staff attending the Conference.

For future events and summary of 2013 conference visit BARS website: *www.eyescreening.org.uk*

Conferences

BARS Conference 2013

Newcastle 26 - 27 September
Gosforth Park Hotel

www.eyescreening.org.uk

Diabetic Retinopathy Screening Training Alumni Day

10th October 2013 on World sight Day
Institute of Education
20 Bedford Way
London WC1H 0AL

www.readingcentre.org

OIA's 28th Annual Scientific Conference

Friday & Saturday 15th/16th Nov 2013
Best Western Moat House Hotel
Stoke-on-Trent

www.oia.org.uk

EASDec 2014 Meeting

Eye Complications Study group

The venue is Padova, Italy
Abstract submission will open around 1st December 2013 and will close Monday 27th January 2014.

www.easdec.org

Courses

Heart of England NHS Foundation Trust in Birmingham:

DR screener/grader course
14 - 18 October 2013; 7 - 11 April 2014

OCT course
7, 8 October 2013; 17, 18 February 2014

Advanced DR grading course
21 - 23 October 2013; 13 - 15 January 2014

Essential Course for Clinical leads of DESP
13 - 14 November 2013

www.retinalscreening.co.uk

The Reading Centre - Moorfields Eye Hospital:

DR Screening training:
21,22 November 2013

www.readingcentre.org

University of Warwick:

MSc in Health Sciences (Retinal Screening - Diabetes)

www2.warwick.ac.uk

Diabetic eye disease in Type 2 Diabetic patient

Case Study by **Iveta Olejkova** - Screener/Grader NCL DESP, **Michela Rossi** - Consultant in Diabetes & Endocrinology Whittington Health, **Susanne Althauser** - Consultant Ophthalmologist Royal Free Hospital and Clinical Lead NCL DESP

Miss Iveta Olejkova

Diabetic Eye Screening is normally performed on yearly basis. Although, attending appointments becomes an important routine for most of the patients, there is a minority for whom it doesn't.
There can be various reasons including: moving home, being unwell, feeling low, and many more. Depression, be it temporary or long term, is one of those reasons. Diabetic patients can have a lot to cope with, attending regular appointments, watching diet and exercise, the list can go on and on. For some this can feel a constant battle. Some have also other health, work or life related issues.

One of the ways of how to reduce the non-attendance rate, is to offer an eye screening appointment during the patient's visit for another appointment at the same location. This has been recently tested at Whittington Hospital, which is one of the screening sites of NCL DES Programme run by NMUH.

Establishing a drop-in clinic meant that patients coming for their Diabetic appointment are offered eye screening at the same visit. Patients who are suitable are then screened, and majority of them welcome this option. This saves time for the patient, it promotes a positive working relationship between different departments, and reduces the rate of non-attendees. Most importantly it can pick-up serious diabetic eye disease in patients who weren't attending their eye screening appointments for long time. So far we were able to offer screening to 142 patients from whom 10 were R3 positive and 5 of those continuous DNA, 3 DNA ICO and DES, and only 2 were already under HES. More detailed audit of our drop-in clinic will be published in our next issue.

Figure 1a. Proliferative Diabetic Eye Disease with Maculopathy in Right Eye - R3 M1

Miss Michela Rossi

Ms UM is a 46 year old lady who had been diagnosed with type 2 diabetes in 2002. She had been under follow up with her GP and was referred to the Whittington Hospital podiatry services in 2013 following a six week history of toe ulceration precipitated by new footwear.
At the time she was known to have longstanding poor glycaemic control (HbA1c 96 mmol/mol when seen), obesity (BMI 39 kg/m2), hypertension, microalbuminuria (diagnosed in 2006) and treated hypothyroidism.
While waiting to be seen in her first review in the multidisciplinary foot clinic with the diabetes Consultant, the retinal screener noted that she had not attended for eye screening for over 5 years. Ms UM agreed to retinal photographs on the same day. She later admitted that she had neglected her diabetes for many years, partly due to depression, which was now being treated by the GP.

Miss Susanne Althauser

Diabetic Eye screening Results:

The referral from the multidisciplinary foot clinic appointment into the drop in clinic for diabetic eye screening resulted in getting photographs in this patient for the first time in 5 years. Her VA was: 6/9 in BE. Her Fundus photographs (see **Figure 1 a,b**) show bilateral florid optic disc vessels (right more than left), clusters of new vessels in the periphery, multiple dot and blot haemorrhages, cotton wool spots, IRMAs and exudates in both eyes, giving a grading of bilateral R3aM1P0. The patient was urgently referred into Ophthalmology and was according to our protocol, phoned by the hospital and an urgent appointment was arranged for the diabetic eye clinic two days later.

Figure 1b. Proliferative Diabetic Eye Disease with Maculopathy in Left Eye - R3 M1

Ophthalmology Results:

At the hospital appointment the diagnosis was confirmed by slit lamp biomicroscopy (SLB) and an optic coherence tomography (OCT) was performed. On OCT the left eye showed marked diffuse diabetic macular oedema (DMO) with a central subfield thickness (CST) of 580 microns in the left eye. The right eye had only minimal DMO and the CST was 290 microns. The findings and the treatment plan were discussed with the patient.

Treatment:

Both eyes had high-risk proliferative diabetic retinopathy (HD-PDR) with more extensive disc vessels on the right eye. The left eye had more severe DMO. The treatment plan to give both eyes a pan-retinal photo-laser coagulation (PRP) of 1800-2000 shots and for the left eye additionally a course of Anti-VEGF injections. The PRP to the right eye was started on the day and the patient was booked to the Anti-VEGF injection clinic 4 days later for an intra-vitreal Bevacizumab injection to the left eye. This was followed one week later by PRP treatment to the left eye, followed by completion of the PRP in both eyes 2 weeks later. Her DMO improved within one week after the first Bevacizumab injection.

Summary Rx:

PRP RE 2200
PRP LE 2400
Anti-VEGF LE x 3

Figure 2a. Right Eye - New vessels on the Optic Disc (NVD).

Figure 2b. Right Eye - Increase in NVDs.

Progression:

During the following 3 months the VA remained stable. The left NVD and NVE regressed, the right NVDs increased despite the laser Rx.

Discussion:

Standard treatment for proliferative diabetic retinopathy (PDR) is still PRP but recently the use of additional Anti-VEGF treatment is being discussed. Untreated PDR can cause loss of vision from vitreous haemorrhage, traction retinal detachment, neovascularization glaucoma (Rubeosis), macular oedema and foveal ischaemia. Laser Treatment of PDR reduces the risk of severe vision loss to over 50% in a period over 2 years, compared to the untreated group. (DRS Report 1976) and the five year risk of blindness is reduced by 90 %. New vessel growth occurs at the posterior pole in the border area of capillary non-perfusion, at the optic disc and at the Iris, leading there to Rubeosis. New vessels generally arise from the venules and at bifurcation of retinal veins. New vessels at the optic disc are a sign of severe ischaemia caused by capillary occlusions that lead to non-perfusion of the retina. Clinical features of high risk proliferative diabetic retinopathy (HD-PDR) are new vessels at the disc or within one disc diameter, in an area larger than a quarter or a third of the optic disc diameter or vitreous haemorrhage with new vessels in the periphery or NVD less than a quarter of the optic disc. Pan retinal laser is given in one to two sessions with a total of 1500-1800 laser shots in the first instance.

Figure 3a. Left Eye - New vessels elswhere and New vessels on the Optic Disc (NVE and NVD).

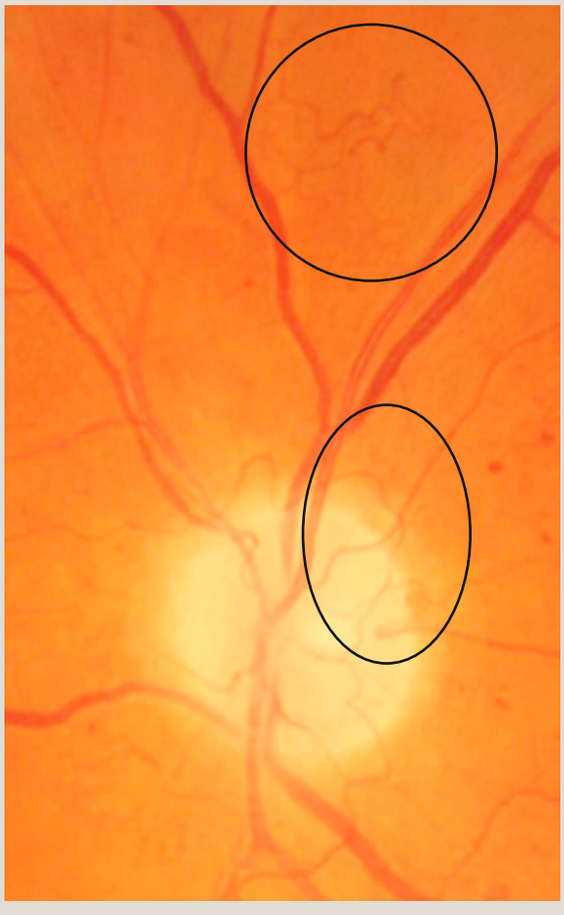


Figure 3b. Left Eye - Decrease in NVE and NVD.

Moorfields Eye Hospital - Reading Centre

Update from **Dr Tunde Peto** MD PhD NIHR Biomedical Research Centre at Moorfields Eye Hospital and UCL Institute of Ophthalmology

Ophthalmology boasts tools of the trade that allow us an access all areas of the eye. You can see, on the screen in front of you, if diabetic retinopathy has worsened, how much laser the patient has received, if there are cataracts, if the cataracts have been operated on and often much more. This makes imaging requirements for ophthalmic studies and screening programmes fundamentally important. The results and Conclusion are based on image analysis for screening patients. Ensuring images are correct and taken to the highest standard is vital.

Ophthalmic image grader

Image graders tend to have a variety of colourful backgrounds and are trained specifically for their task once they begin the job. They learn to detect disease through analysis and to become professionally recognised at international standards takes time and perseverance. Graders can be in training up to one year before they begin to work alone and even once fully qualified they take monthly test and training exercises to ensure they are up to scratch and aware of any changing criteria. The work involves levels of high concentration and being able to pay excruciating attention to detail while adhering to protocol. Graders need to be invested in and given the best possible training programme as the job is not one which can filled by temporary staff for a few months at a time. Reading Centres have a seemingly small work force, who are all highly trained or in the process of becoming so. Some of these graders will work specifically on grading images sent in from their screening programme, or they will partake in clinics and take images and grade on site.

Images at the Reading Centres

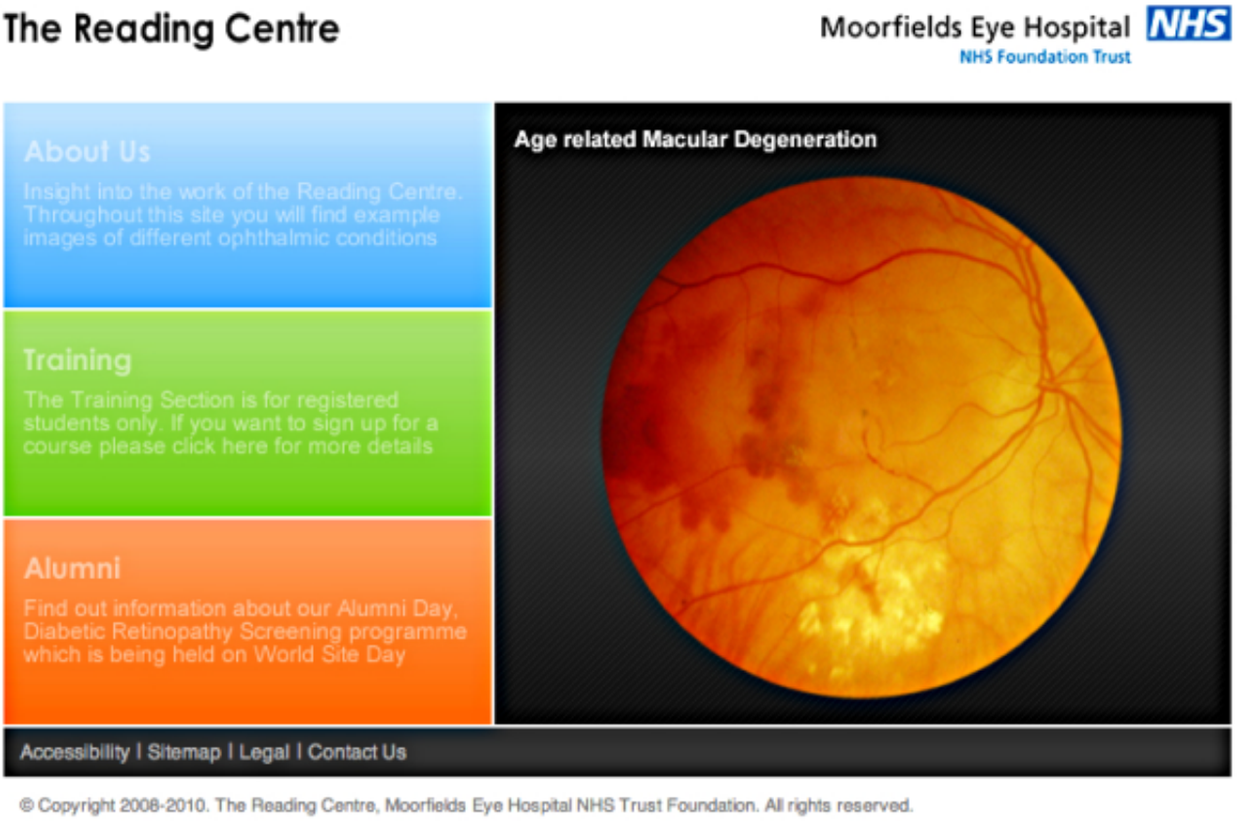
Protocols are strict for screening practice. If protocol steps are missed it can mean that mistakes or incorrect decisions are made which directly affect the patient. This must be avoided, so all steps should be followed by every staff member, from admin to clinical lead and programme manager. When images are taken at screening they are done so using software designed specifically to organise a patient database for screening of one disease. When the images are saved they are kept on the software and then staff at the reading centres are able to log in and grade at either primary or secondary level. If images are sent to arbitration level, the final decision lays with the clinical lead. The graders will see other relevant information such as known diseases, medications, age of patient etc that will help them to decide on a grade. Only staff that need to for the purpose of work have access to the software which holds patient images and information. Patients are asked if they agree to this before the screening process begins and are assured that their information will be stored securely. If grading takes place on site while screening is happening, it is done so in a private environment.

Approaching the images

When a grader first sees an image from screening, they must set about ensuring it is of good enough quality to grade without recalling the patient to be re-imaged. If image quality is deemed ungradebale, or there is a lesion confounding the specific part of the eye needed, grading will be stopped and the patient will be put into a specific care pathway, where they will be seen again and different equipment used if necessary. Graders systematically work their way around an image, looking for certain lesions or signs of disease. When they are satisfied they have identified everything they will give the image a grade on the software. Graders will often highlight an abnormality even if they have only a small suspicion of it, so that a clinical decision can be made.

Quality control

Qualified graders must complete a monthly test and train set online, which ensures they are keeping their skills fresh and grading to a level recognised as high by the Royal College of Grading. They must also meet number targets. If a grader fails to make up their numbers and is not grading enough, they will lose their grading rights. The job requires such attention to detail and an awareness of many different factors that could mean disease is present, that if someone only graded sporadically they may not be doing so at a high enough standard. The point of screening patients is to ensure they are given treatment should it be needed, so the images and the outcomes of grading are of the utmost importance.



www.readingcentre.org

Spotlight on 15 Healthcare Essentials campaign

It is two years since Diabetes UK introduced its 15 Healthcare Essentials campaign, with the strategic objectives of improving the quality of care for all people with diabetes as well as supporting them with self-management and raising awareness of the checks they need.

The 15 Healthcare Essentials sets out the basic, but vital, health checks that everyone with diabetes, Type 1 or Type 2, needs to receive on a regular basis. These checks are based upon official NHS guidance across the UK and, in short, they clearly explain the minimum standard of care that people with diabetes need to have to help them manage their condition successfully and maintain their health. Retinal screening, once a year, is one of the Essentials and a number of clinics around England (see box) have been working with Diabetes UK in order to ensure that patients do receive this vital eye check as often as recommended in order to protect their vision. On this point, people with diabetes do need to be made aware that this check is different to the routine check carried out by their optician. Therefore, the wording on the full checklist is as follows: 'Have your eyes screened for signs of retinopathy every year. A special digital camera is used to take a photograph of your retina (at the back of your eye) and a specialist will look for any changes. This free test is part of the annual diabetic screening service and is different to the checks carried our by an optician, If you notice any changes between appointments it is important to contact your optometrist or GP.'

It is hoped that, armed with the 15 Healthcare Essentials as a checklist, people with diabetes will feel more empowered to influence their own care. A patient can use it as a tool to take to health appointments and refer to it when asking their healthcare professional about any checks that might be missing, such as a foot check or retinal screen.

Furthermore, the use of the 15 Healthcare Essentials checklist will help Diabetes UK and its partners to build a national picture of diabetes care which will help drive improvements in the context of the new NHS.

What has the campaign achieved in two years?

The 15 Healthcare Essentials checklist has now reached well over one million people with diabetes. It is available in nine languages (Hindi, Bengali, Somali, Arabic, Polish, Gujarati, Urdu, Punjabi and English). Diabetes UK is also aware that the checklist is being used by thousands of doctors, nurses and diabetes specialists with their patients to help them to manage their condition. A Diabetes UK survey of healthcare professionals showed that 69 per cent had seen the checklist and 77 per cent of these had used it when working with people with diabetes.

Furthermore, some hospitals are measuring the quality of their care by comparing the services they offer with the 15 Healthcare Essentials checklist. They can use this information to identify where improvements are needed.

As well as keeping the importance of the 15 Healthcare Essentials in the media spotlight both nationally and locally, Diabetes UK is also making sure that MPs are aware of the campaign and of the standard of diabetes care in their area. All of this is helping drive forward improvements. In conclusion, having the 15 essential health checks every year is the passport to helping people with diabetes to enjoy long and healthy lives, free of the serious complications.

Have you discussed Diabetes UK's 15 Healthcare Essentials with your patients? Has your retinal screening clinic been involved in the campaign in any way? Please share your experience by contacting healthcare@diabetes.org.uk.

Diabetes

15 HEALTHCARE ESSENTIALS

There's a minimum level of healthcare everyone with diabetes should receive:

DIABETES UK
CARE. CONNECT. CAMPAIGN.

At least once a year

1. Your blood **glucose levels** measured (HbA1c blood test)
2. Your **blood pressure** measured and recorded
3. Your **blood fats** (cholesterol) measured
4. Your **eyes screened** for signs of retinopathy
5. Your **feet checked**
6. Your **kidney function** monitored
7. Your **weight checked** and your **waist measured**
8. If you smoke, **support to help you quit**
9. A **care planning review** to discuss and agree goals between you and your healthcare team
10. Access to a local **diabetes education course**
11. If you are a child or young person, care from specialist **diabetes paediatric healthcare** professionals*
12. Continuing high-quality **diabetes care when you're in hospital**
13. If you're a woman who is **planning to have a baby,** high-quality support from specialist diabetes healthcare professionals from preconception through to post-natal care
14. Help from **specialist diabetes healthcare professionals** to manage your diabetes
15. **Emotional and psychological support**

Children should also receive:

- More frequent checks for HbA1c, weight, height and general health
- Formal screening for complications from age 12.

*To find out more go to www.diabetes.org.uk/Type-1-essentials

If you aren't getting all the care you need, please discuss this with your diabetes healthcare team.

For advice and support call our Careline on 0845 120 2960

Get involved with our work and help improve services – visit www.diabetes.org.uk/get-involved
Become a member of Diabetes UK – visit www.diabetes.org.uk/membership or call 0845 123 2399

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This is what two retinal screeners had to say about Diabetes UK's 15 Healthcare Essentials…

"Overall our experience with the 15 point checklist has been quite positive. Our screeners are operating from five different sites, and hand out a leaflet to those patients that attend their appointments. An interesting point that is often raised from our patients is that many of them are unaware of what health checks are available to them, so having it in plain print is ideal.

"My personal feeling about the 15 'points' is that it is a brilliant concept; it allows patients to take some control over their personal wellbeing. Generally, we will advise a patient to discuss the 15 healthcare essentials in more detail with their GPs, and encourage them to follow through on those points that apply to them.
"In regards to whether or not we have seen an increase in patient response, this is difficult to gauge. The screening programme has taken several steps to try and encourage more patients to have annual retinal screening; therefore we have seen a steady increase in uptake numbers. Nevertheless, I would hope that the checklist has had some impact on those numbers, and that other services will also see an increase in patient numbers."

Tanya Grewal,Diabetic Retinal Screening Manager

1st Retinal Screen Ltd, Kensington, Chelsea & Westminster NHS Diabetic Eye Screening Programme…

"We have been using the 15 Healthcare Essentials checklists for over a year now and have received around 17,000 of them to distribute from Diabetes UK. Very few patients decline them. We hand patients the checklists when they attend clinic at any of our five screening sites. Then we encourage our patients to read the checklist and, if in doubt about any of them, to have a discussion with their GP or practice nurse. Although we've not had formal feedback from patients, I have noticed that they seem keen to follow up on the checklist.

"I find the checklist useful for patients who have not been seen by their healthcare professional for some time or who have missed their retinal screening appointment and also for new patients who are sometimes overwhelmed with information! From my own experience, I find the checklist very helpful. It's clear, to the point and easy for the patients to read."

Mary Griffin, Clinical Nurse Specialist, Guy's and St Thomas' Diabetic Eye Screening Programme

Retinopathy screening clinics currently engaged in Diabetes UK's 15 Healthcare Essentials campaign

Croydon Health Services NHS Trust
South Tees Diabetic Eye Screening Programme
Brent Diabetic Eye Screening Programme,Wembley
Peterborough & Cambridgeshire Diabetic Eye Screening Programme
Clinical Media Centre, Brighton and Sussex University Hospitals NHS Trust
Berkshire Diabetic Eye Screening Programme, Berkshire Healthcare NHS Foundation Trust
Diabetes Intermediate Care Service, Somerset Partnership NHS Foundation Trust
Shropshire Diabetes Eye Screening Programme
Liverpool Diabetic Eye Screening Programme
Northamptonshire Retinal Screening Service
Guy's and St Thomas's Diabetic Eye Screening Programme
County Durham & Darlington NHS Trust
DESPLeicester, Leicestershire & Rutland NHS Diabetic Eye Screening Programme
Diabetes Service and Retinal Screening Programme, Barts NHS Trust
1st Retinal Screen Ltd, Kensington, Chelsea & Westminster NHS, Diabetic Eye Screening Programme
Sunderland and South Tyneside Diabetic Eye Screening Programme
Diabetic Retinopathy Screening Service, Wrightingon Wigan & Leigh Foundation Trust
Norfolk & Norwich University Hospital NHS Foundation Trust
Guildhall Walk Patient Management Centre
East Sussex Healthcare NHS Trust
North and East Hertfordshire Diabetes Eye Screening Programme
East London Foundation Trust – Community Health Newham
East Dorset Diabetic Eye Screening Programme
Lancashire Diabetic Eye Screening Programme
Ealing PCT Diabetic Eye Screening Programme
Birmingham Solihull and Black Country Diabetic Eye Screening Programme
Bolton Diabetes Centre, Bolton Foundation Trust NHS
Ealing, Hounslow and Kingston DESP
Diabetes Centre, Doncaster Royal Infirmary
Bridgewater Community Health Care NHS Trust
North of Tees NHS Eye Screening Programme

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On Age-related Macular Degeneration

by **Mr Martin Harris** MD FRCSEd
FRCOphthConsultant Ophthalmologist AMD lead Royal Free NHS Trust

The major cause of severe and partial sight impairment in the developed world is age-related macular degeneration. Age related maculopathy is a progressive disease of the central retina (*macula lutea*). It has the following signs which are visible on standard retinal photographs. One or more signs may be seen in any individual.

1. Drusen yellow/white lesions > 63 microns between the retinal pigment epithelium and Bruch's membrane. Recent work suggests that drusen smaller than the 63 micron limit are very common in Caucasian eyes. In 500 retinal photographs from 18-54 year olds drusen <31.5 microns were seen in 89.7% of eyes, > 31.5<63 microns in 45.9% of eyes (Silvestri et al. Eye 2012). This makes them the commonest visible abnormality in the central retina.

2. Hyper and hypopigmentary changes in the retinal pigment epithelium. The classical teaching is that the RPE dies as drusen reabsorbs making this a late stage phenomenon but there is no doubt that these changes are seen in eyes at earlier stages of the degenerative process. The pathological processes for this are mysterious at present.

3. Atrophic macular degeneration or geographic atrophy, well defined atrophic areas of the RPE and choriocapillaris. Confocal imaging of the retina demonstrates increased autofluorescence before the RPE dies. Lipofuscin, material that represents incomplete degradative processes in the cells, accumulates in the RPE cells over time and leads to cell death through the process known as apoptosis.

4. Neovascular macular degeneration. Choroidal new vessels leading to serous or haemorrhagic detachment of the pigment epithelium and retina. Leading to central scarring of the retina and severe visual loss. The central tissue factors that lead to the growth of these vessels are in the vascular endothelial growth factor type A family VEGF-A) inhibitors of these factors are now used to limit the disease process and maintain central

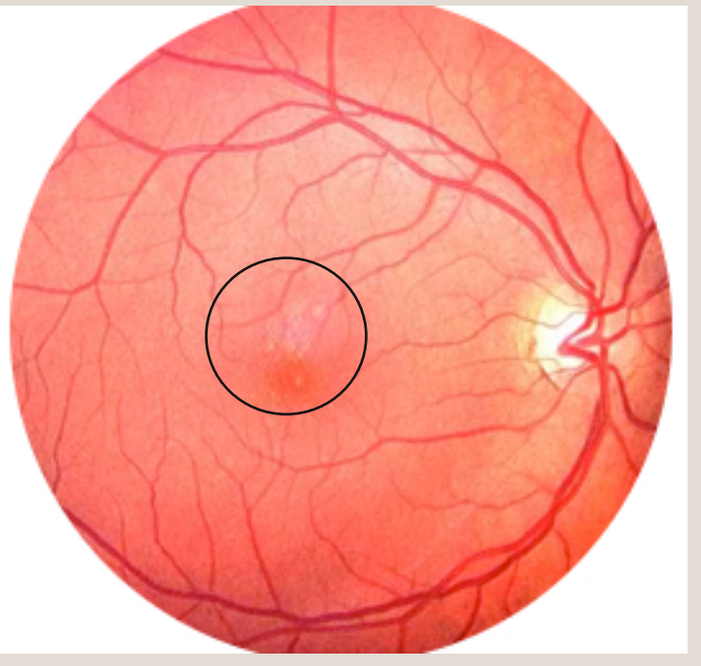

Figure 1. Drusen in 47 year old Caucasian retina.

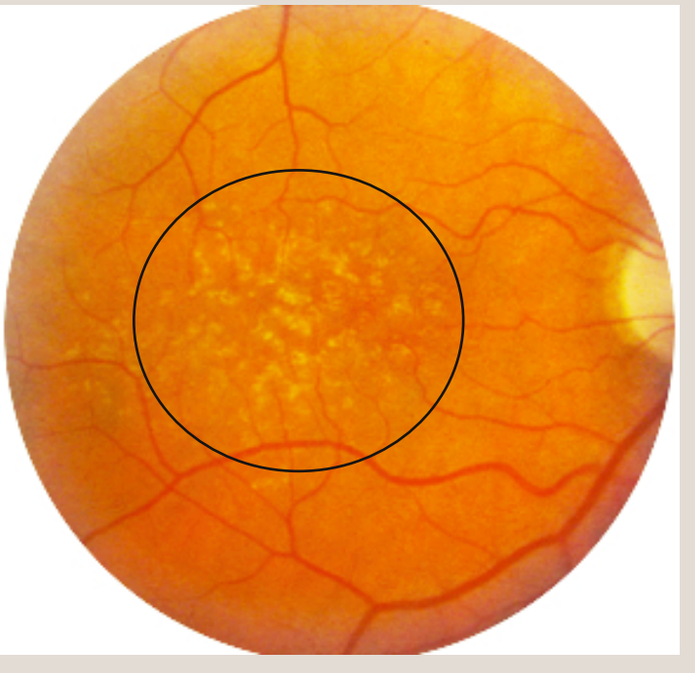

Figure 2. Larger drusen with RPE changes.

vision. The sooner this treatment is started the better, hence the requirement for rapid referral.

Epidemiological studies have long suggested a genetic component partially responsible for the incidence of sight threatening late stage AMD. Particularly marked in the US studies where incidence in the white population is consistently higher than that seen in the black (Klein et al. 2011). Histopathological studies in the late 1990s started to demonstrate the presence of complement factors in drusen (Hageman et al Prog Retin Eye Res 2001) and in 2005 three separate research groups reported a relationship between AMD and the complement factor H gene(Edwards et al, Haines et al, Klein et al Science 2005)

Complement is a cascade of proteins that is active in the body's immunological defences. Factor H is one of the control proteins that regulates the complement system. The gene has multiple variants (alleles) some of which confer an advantage and seemingly are protective with regard to the development of AMD and others that increase the risk of developing the disorder.

Currently, much research is directed at how the complement system is activated in the sub-retinal tissues and looking to manipulate the system to decrease the incidence in those who are at genetic risk. As yet there is no clinically useful outcome from this work.

The advent of VEGF-A inhibitors, drugs directed at neutralising the effect of the family of tissue factors central to the development of choroidal neovascularisation, has revolutionised the treatment of the 'wet' type of AMD. The majority of these cases can now be treated. Vision can be maintained and many times improved. In most areas of the UK, rapid access schemes are in place to allow diagnosis and treatment to be started without delay. Immense changes have occurred in our understanding of this disease in the last 20 years and there is no doubt that scientific discovery will continue to alleviate the suffering caused by it in the future.

The author has received travel and educational sponsorship from Pfizer, Novartis and Almeira. He has also worked on advisory boards for Novartis and Bayer.

Figure 3. Geographic atrophy.

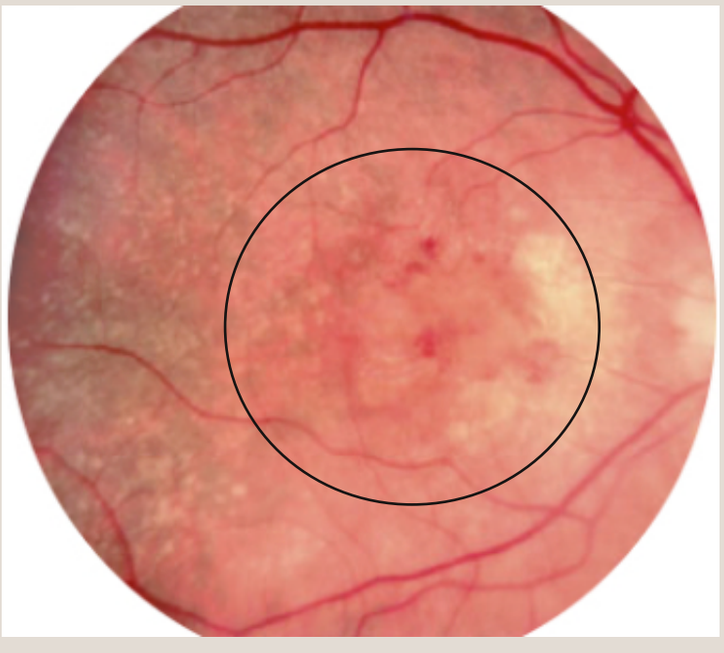

Figure 4. Choroidal neovascularisation.

Examples of:

Standard vision

Vison with AMD

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The British Association of Retinal Screening

Jacqueline Mansell (past Chair)

Bars was born in 2001 when Professor Roy Taylor and Lillian Lovelock, who were running retinal screening in Newcastle, decided to formalise the training workshops they were organising for the new profession of retinal screening.

For many years Bars organised an annual conference which got screeners together, had excellent teaching, good interactive sessions and also some fun!

In the background some very hard work went on with what is now the English National Programme to develop the qualification and begin the process of standardising the screening process leading to the National Programme we have today. Bars Council members are all volunteers and they now sit on all the National Team committees representing the screening community in their own time.

The Council were always looking for ways of better serving the screening community as a whole and so meetings for Programme Managers, and latterly Failsafe Officers, were set up along with internet forums for easy communication.

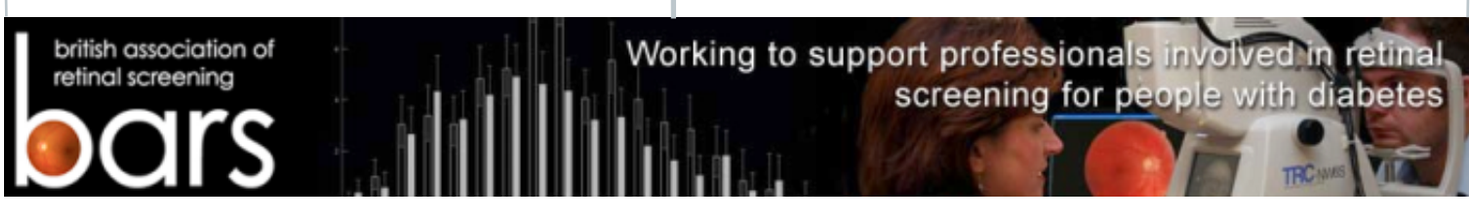
Our name was changed from Retinal Screeners to Retinal Screening to encompass all the services involved in the retinal screening process and not just the screener/graders.

This was the thinking behind our strap line 'working to support professionals involved in retinal screening for people with diabetes' and the updated website ***www.eyescreening.org.uk*** facilitates this.

Tutorial days have been set up and are run in different parts of the country to help screeners get through the various modules of their C&G qualification. This is ably run by Susanne Kelly and David Sculfor from the Education group.

Bars Council is a great way to help drive forward the advance of retinal screening and serving on Council was one of the most rewarding times of my career. It's also a great way to get to know the screening community and I would recommend it to anyone!

Do consider it!



'Retinal screening - a worldwide dream'

Dr Surendra Upadhyay
Ophthalmologist (Hon. visiting Professor)

There are over 4200 people blind due to Diabetic retinopathy in the UK and 1280 per year will be added to this number. A large percentage of this number is contributed by undiagnosed patients and patients who failed a screening appointment.

The NHS has provided this very expensive and very efficient free of cost but unfortunately it is underutilized. It is a very simple test involving high resolution photography of the retina, which is the light sensitive layer of the eye. It is a painless procedure and takes less than an hour. Early detection of bleeding in the retinal layer is monitored very carefully and if required, treatment is performed to save the precious gift of sight.

There are 2 types of Diabetes:
Type 1- inability of insulin production by pancreas
Type 2- under production of insulin and utilization by the body

Diabetic Retinopathy can occur in any age group, affecting both males and females. It is more common in South East Asian and Afro Caribbean communities (Overweight, middle age and irregular lifestyles are contributory factors).

During the medical camps I attend in various parts of the world, it is tragic to see people go blind due to Retinopathy which can be prevented. Unfortunately, such screening is not available in these countries. Sadly, during awareness clinics arranged in and around the UK, many people remain undiagnosed and have not taken screening seriously.

In my opinion this service is one of the most important tools in the prevention of blindness due to Diabetic Retinopathy. There may be many reasons not to attend like taking time off work, transport, family support, communication, social and economic deprivation, young people and students, homeless people and people who have travelling jobs etc. However, one must realize the importance of your eyes and you and only you are responsible to preserve your sight.

40% of diabetics have some form of Retinopathy. The statistics are shown below (an eye opener):

2.6 million people were registered as Diabetic in the U.K. (2009) This will double by 2025. Surprisingly half a million people are undiagnosed.
400 people per day, 17 per hour, and 3 people every minute are diagnosed with Diabetes.

Diabetes is a silent killer- complications include heart disease, stroke, renal failure, neuropathy, loss of limbs, complications during pregnancy and fatality.

YOU NEED YOUR SIGHT TO REALIZE YOUR DREAMS AND SEE THE WORLD, SO PLEASE DO NOT IGNORE THIS WONDERFUL SERVICE OFFERED FREE WHEREVER YOU ARE IN THE UK.

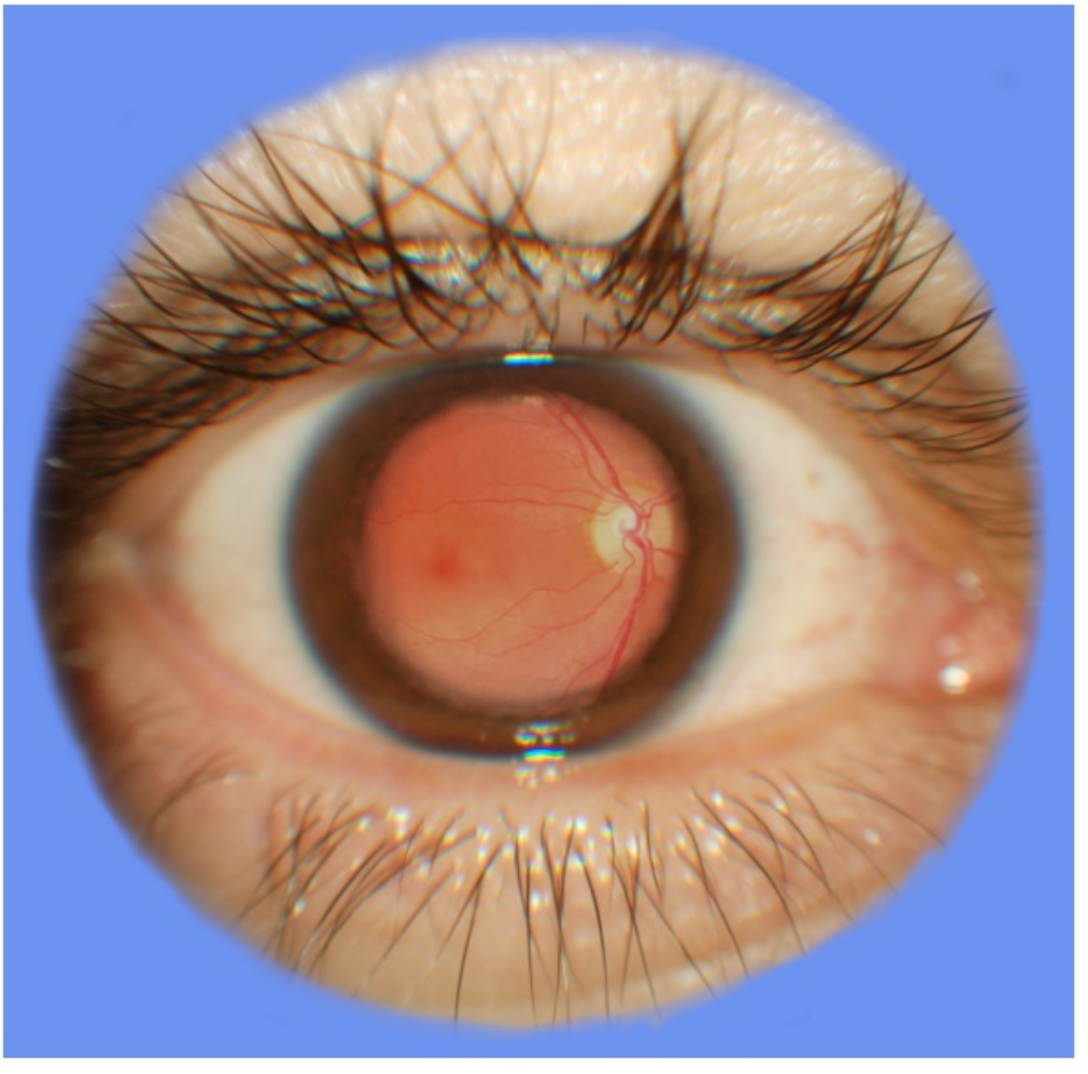
Examples of:

Standard vision

Vision with Proliferative Diabetic Retinopathy

In the early eighties when Blindness and Medical care was a burning issue in the devoloping countries, I decided to take a few dedicated Medics and Paramedics to assess and see if it was possible to offer the caring hand in very remote parts of the world. The response was unbelievable for us as we received so much love from people. The joy on the faces of the people was unforgettable when bandages were removed after the operation from their eyes as one person explained **" She has seen the beauty of the world which she nearly forgot since she lost her sight (Mature Cataract in Both Eyes)."** It was a touching moment for us. This encouraged us, and now camps have been arranged in remote parts of Africa, India, Sri Lanka, Pakistan, Bangladesh, Siberia and South America. Normally it is a Polyclinic style camp where Ophthalmologists, Pediatricians, ENT Specialists, Endocrinologists, Gastroenterologists, Physicians, General surgeons, Optometrists and Pharmacists participate. Everyone pays their own fare and live at camp site in basic accommodation. It is like a working holiday to offer your skills for free in return for invaluable love.

Ever wondered how the eye looks inside?



Looking into your eyes can expose Diabetic Changes.

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We are distributing to major Eye Hospitals and Diabetic Eye Screening Programmes around the country.