

ABSTRACTS

Diabetic Retinopathy Screening

Chairperson: Dr Dawn Sim

Historical Perspective of Diabetic Retinopathy Screening in the United Kingdom - Where do we go from here?

D Sim

The development of diabetic retinopathy screening services will be covered from a historical, technical and clinical perspective, particularly focussing on lessons learnt and the impact of diabetic retinopathy on blindness in the United Kingdom. Details regarding evidence-based justification of call and recall timelines, barriers to update of screening and potential interventions to increase uptake of screening will be discussed. Future perspective, including the role of automated diabetic retinopathy detection software utilizing artificial intelligence-enabled and how it will impact and change the screening workforce will be discussed. Finally, the health economic aspects of different models of diabetic retinopathy screening and their utility in different health service environments will be summarized.

Progression of Diabetic Retinopathy

Z Saihan

We will discuss the progression of diabetic retinopathy, illustrated by a variety of imaging techniques, including wide-angle photography, retinal angiography and optical coherence topography. In diabetes, high levels of blood glucose cause damage to blood vessels. In the retina, this results in anatomical changes which can be observed and photographed. Over time, the retinal changes can progress through characteristic stages, which may not cause any symptoms. As the retinal changes become more advanced, there is an increasing risk of sight loss. Review of retinal photographs to detect anatomical changes and identify individuals who may benefit from treatment before sight loss occurs forms the basis of diabetic screening. We will review the different stages of diabetic retinopathy and at the end of the session, participants will have a better appreciation of the anatomical changes and stages that can be observed in diabetic retinopathy.

Principles of Diabetic Retinopathy Screening

C Griffiths

The diabetic retinopathy screening workshop will provide an insight into the long-term implications of diabetes, with the main focus on ocular complications, more specifically diabetic retinopathy. As diabetic retinopathy is a major avoidable cause of blindness, which occurs as a result of long-term accumulated damage to the small blood vessels in the retina, it is an important health priority. The workshop will showcase the progress in the development of the National Screening Programme across Jamaica over the last year and touch on the challenges that lie ahead. Diabetes will be discussed as a multi-factorial condition needing an approach from a multi-disciplinary team to successfully combat its effects.

The workshop should provide you with a better understanding of diabetes and how you can educate those around you on everyday lifestyle changes that could make a huge impact. There will be demonstrations on how to carry out diabetic retinal screening by the trainees currently enrolled in the International Certificate in Diabetic Retinopathy Screening and Grading, and a rundown of the entire screening process, from initial encounter with a diabetic nurse or general practitioner to diagnosis of disease and treatment plan.

What Happens to Screen Positive Patients? — A Summary of Treatment Focussing on Retinal Laser Treatment

K Kortum

It is essential to also provide diagnostic and treatment capacity when setting up a diabetic retinopathy screening service. In this session, we will talk about the pathways in the United Kingdom for screen positive patients. This session will focus on diagnostic retinal imaging, including who to refer for fluorescein angiography and/or optical coherence tomography (OCT).

Panretinal photocoagulation (laser) in patients with visually-threatening diabetic retinopathy will be discussed.

The Importance of Quality Assurance Standards in a Diabetic Retinopathy Screening Service

A Nair

The United Kingdom National Health Service (NHS) diabetic eye screening (DES) programme aims to reduce the risk of sight loss for people with diabetes through the early detection, appropriate monitoring and treatment of diabetic retinopathy, which is one of the biggest causes of blindness among people of working-age. Quality assurance (QA) ensures the maintenance of a desired level of quality in a DES programme, by means of attention to every stage of the process of delivery or production. This allows for continuous improvement in the screening programme and enables providers and commissioners to identify where improvements can most effectively be made across the pathway.

Examples of QA processes will be covered; for example, the objective, criteria and measures used will be discussed. An overview of the standards across the entire screening pathway, based on the following themes below will be covered.

- identify population
- inform
- coverage and/or uptake
- test
- diagnose
- intervention/treatment
- outcome
- minimizing harm
- staff education and training
- commissioning/governance