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The East London glaucoma prediction score: A web based glaucoma risk calculator. Influence on screening in particular diabetic retinopathy

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C creening for Glaucoma is difficult at the primary level. Part of the problem is to know whom to refer for expensive **O** investigations. The East London glaucoma prediction score (ELGPS) is a web based risk calculator that has been developed to determine Glaucoma risk at the time of screening. The tool utilizes known risk factors that are available in a low-tech environment. This free, web based service is useful in situations where access to specialist care is difficult. The process is educational and assists screeners at the primary level to develop competence in risk assessment. The ELGPS system utilizes a user specific database that can be reported on by individual, screener classification and as a whole data set. Glaucoma has a relatively low incidence in the general population. Linking glaucoma screening to screening for another more prevalent disease such as diabetic retinopathy increases disease detection. The methodology for Glaucoma screening has influenced the establishment of the South African diabetic retinopathy system. This system also utilizes a free, web based database with patient tracking capacity to allow non-screening healthcare professionals access to the screening records. The system incorporates systemic risk for developing sight-threatening retinopathy. This presentation describes the results of the first 400 patients of known diagnosis used to validate the ELGPS tool. Biostatistical analysis a correlation with the established diagnosis with sensitivity of 88% and a specificity of 75%. With this basis for screening, the process behind the development of the SA diabetic retinopathy system is described.

Biography

Stephen Paul Cameron Cook BBCh, FCS (Ophth (SA) Resident in East London in the rural Eastern Cape province of South Africa. A general Ophthalmologist with interests incorporating Vitreoretinal, Glaucoma, Cataract and refractive and Occuloplastic surgery. A Director of the Eye Centre East London. He has developed the East London Eye Hospital and African Eye Foundation (PBO). His vision is to develop systems to improve access to a healthcare and training in Africa. Public sector appointment at Frere Hospital. Lecturer at Walter Sisulu medical school. Developed screening methodologies for glaucoma and diabetic retinopathy for implementation into the diverse South African healthcare scenario.

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