ETM/375 - Perceptual Learning In Enhanced Amblyopia Treatment (PLEAT): An Exploratory Randomised Control Trial In The Treatment Of Amblyopia

Amblyopia 'lazy eye' is the leading developmental and non-pathological cause of visual impairment in children affecting 2-5% ofthe population. Despite the care taken to detect and treat amblyopia in early childhood, the condition persists into later childhood and adulthood for many patients. For over 260 years, the primary treatment for amblyopia has been occlusion (patching) ofthe non-amblyopic eye but long treatment periods are difficult and distressing for the patient and parent. Recently, the success of perceptual learning (via videogame playing) has raised the question as to whether it could offer a supplement or alternative to traditional amblyopia treatment regimes. Our main aim is to develop new interventions, which embed visual training in videogame type tasks restoring both visual acuity and stereopsis. The results of this study will provide evidence for a fundamental shift in clinical practice and the applicability of a new treatment to a common condition.