New smartphone app for strabismus screening

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Amblyopia is the major cause of unilateral low visual acuity among children and the most important cause of it is strabismus. There are only few strabologists in any country, generating difficulties to early diagnosis of strabismus. That is the reason we decided to work on a smartphone software able to perform strabismus screening and easy to be operated by non-medical professionals. The software localizes the eyes of the subject and based on an algorithm similar to Krimsky method it can disclose the strabismus of the patient (Fig. 1). We first check it with 224 subjects (Fig. 2) among strabismus patients (24) and children and teenagers of public school (200) and it seemed to be reliable to detect the absence of strabismus (only two false negative results compared with strabologists exam), even if it had a greater false positive diagnosis (31). But these false positive results are not really important when talking about screening, once those patients will be referred to a specialist for a detailed examination.

Recent Publications


Biography

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