SAHLGREN’S SATURATION TEST (P/N 4595)

Purpose of the test. The Sahlgren’s Saturation Test (SST) is specifically designed for detecting and grading acquired color vision defects. It depends on the elevation of the saturation threshold for bluish purple colors that occur in acquired diseases of the retina and the anterior visual pathways.

Description of the test. The SST consists of 12 test caps contained in a plastic case. There are five bluish green caps with different saturation, five bluish purple caps with different saturation, and two gray caps.

Administration of the test. The SST should be presented in good reading light, preferable about 300 lux (30 foot-candles) of white light, in a neutral surround. Remove all caps from the case. Move the caps to the left color side up and arrange the test caps in random order. Instruct the subject to be tested that some of the caps are bluish green, some are bluish purple, and some are gray. The task for the patient is to move all caps appearing to contain any bluish green or bluish purple color, and transfer these caps to from the left to the right. The transferred caps need not to be arranged in any particular order. Only gray caps are allowed to stay on the left. After completion, the subject should be asked to check the results carefully, and to make any necessary changes. There is no need for a time limit. Most acquired defects occur monocularly so it is recommended that the test be performed with one eye occluded. Richmond Product Reversible Occluding Glasses P/N 4523C can be employed for this purpose.

Recording results. Turn all caps remaining on the left considered by the patient to be gray upside down, and add up the numbers printed on the bottom surface. The sum gives the test score. The transferred caps are ignored, even if the subject transfers one or both pure gray caps. Erroneous transfer of gray caps is allowed because of the threshold measuring nature of the test: it has no diagnostic value.

Interpretation of results. A test score of 10 or less is normal. A score of 15 is suggestive of abnormality. A score of 20, or more, is certainly abnormal and indicates defective color vision. The higher the score, the more pronounced is the abnormality. CAUTION: Some individuals with congenital color vision defects require combination of the SST with a test such as HRR 4th Edition or Ishihara that is sensitive for congenital color vision defects. These tests should be administered according to the manufacturer’s recommendation. The number of erroneously read plates is recorded. For the Ishihara, if there are more than two errors, the result is abnormal. To differentiate between a congenital defect, and acquired defect, or a combined defect, see diagram.

Care of the test. Do not expose the pigment papers to light more than necessary to avoid bleaching. Warn the patient that the pigment papers should not be touched. Finger cots that cover the finger tips Richmond Products P/N 4429B may be used to prevent fingers touching the color targets.