EMOTIONAL PROFILES TO THE RORSCHACH TEST IN SUBJECTS AFFECTED BY CENTRAL SEROUS CHORIORETINOPATHY: PRELIMINARY OBSERVATIONS

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Abstract: Psychological variables could be related to disorders of vision with particular interest of depressive features, but with little attention to dimensions such as stress and anxiety. Psychological stress associated with hyperactivation of the sympathetic autonomic nervous system, is considered the most important risk factor of a disorder of vision, the Central Serous Chorioretinopathy (CSC), whose etiology has not yet been clarified. This study is designed to examine the psychological literature regarding CSC and explore in a preliminary the projective methods of the Rorschach test, any correlations between personality variables and predisposition to CSC.

Keywords: Emotional profiles, Central Serous Chorioretinopathy, Rorschach test.
1. INTRODUCTION

Central serous chorioretinopathy (CSC) is a disease characterized by an idiopathic serous detachment of the neuroepithelium at the posterior pole of the retina produced by the passage of fluid from the choroid into the subretinal space through a defect in the pigment epithelium. The CSC is classically considered a disease that favors the male sex (85%), with an age of onset between 30 and 50 years. The onset is usually insidious and symptoms are unilateral. The vision is darker, more colors faded, visual acuity rarely reaches values of less than 5/10 and improves with positive lenses. At biomicroscopy at the level of the pigment epithelium you may notice small multiple spots, yellowish, which consist of proteinaceous precipitates and characterize the phase resolution of the exudative process.

There are cases of CSC with clinical and functional impairments, particularly severe. They are characterized by bullous retinal detachments, which can extend to the lower periphery, are often bilateral forms and prone to relapse. The administration of corticosteroids may be the cause of these more serious cases of CSC. The first episode of the disease typically resolves spontaneously in 3-4 months with an excellent functional recovery. However, sometimes it tends to recur (45-50% of cases) and can become chronic due to the formation of areas of persistent failure of the pigment epithelium pump function. Systemic hypertension appears to be a risk factor for chronicity. In cases of chronic CSC more or less extensive areas of pigment epithelial atrophy can be observed and, in the most advanced cases, macular degeneration. The alterations of the macular pigment epithelium and neuroepithelium result in serious and irreversible damage of central vision. Since the first description of the CSC, made in 1866 by von Graefe, various etiological factors and pathophysiological mechanisms were discussed, although the etiology of CSC still remains undetermined (Marmor MF 1997). Since the early 90s the angiographic findings have revealed that the basis of the disease is a condition of vascular hyperpermeability of the choroid. It remains unclear how choroidal hyperpermeability establishes itself. The role of adrenergic stimulation is credited in the association of the disease with stress which leads to an increase in blood levels of catecholamines and by the observation that a therapy 'ex adjuvantis' with systemic beta-blockers (which block beta-adrenergic receptor) often determines the resolution of the clinical picture. The conditions that lead to an increase in cortisol blood as pregnancy, Cushing's syndrome, systemic lupus erythematosus, hemodialysis, organ
transplantation, and of course corticosteroids are considered risk factors. Psychosomatic aspects have been suggested several years by Harrington (1948) and Zeligs (1947), who observed a high incidence of CSC in the staff of the U.S. Navy during the Second World War. This suggested that anxiety and psychological trauma have a role in the onset of this disorder (Hartmann 1952). Subsequent studies show that a high number of subjects was suffering from CSC already as a young man (Yannuzzi 1987). Some authors suggest a possible model of development of the CSC as a result of stress: during phases of acute stress, the blood pressure increases and tends to cause hyperperfusion of the vascular bed. In normal individuals, the vasoconstriction induced by the stimulation of the sympathetic, maintains blood flow constant in a physiologic range, despite the stress-induced increase in blood pressure. Instead in patients with CSC, it has a high activation of the sympathetic system and a trend toward lower sympathetic reactivity. Therefore at the time of stress in patients with CSC stimulation of the sympathetic neuronal choroidal blood vessels is not able to maintain homeostasis and probably leads to choroidal hyperperfusion with secondary pigment epithelial dysfunction. Improper sympathetic response during the stressful stimuli may be an important factor in the pathogenesis of CSC (Hem Kumar Tewari, 2006). Several studies have associated the CSC with the type A personality (Yannuzzi 1987), which are characterized by active people, with competitive attitude, easy to stress, with a constant feeling of having to deal with emergency situations ("hurry sickness"). These traits make individuals more vulnerable to both physiologic changes characteristics of a heightened arousal, both as regards the social proximity. Basic Components of Type A personalities are hostility and anger. These represent multidimensional constructs a cognitive component (cynicism, hostile attributions), emotions (anger, disgust) and behavior (verbal aggression, behavior blocker). This style produces changes at the physiological level and reduces the availability of social support. Research aimed at identifying a level of identifiable stressful life events preceding the onset of CSC have given conflicting results, this reinforces the idea that stress-related disorders affected mostly personality characteristics and especially the contact with the emotional world (Bahrke U. 2000, Rupert C, et al., 2007). The existing literature does not investigate specifically the emotional dimension and structuring of patients with CSC. This contribution represents a preliminary investigation in an attempt to identify the occurrence of specific related emotional and defensive. The aims is to identify the correlations between personality variables and susceptibility to
stress-related diseases such as CSC. Through the use of quantitative scales that allow you to place the score of the subjects with respect to the regulatory range of each feature, and the Rorschach, we investigate the emotions, the state and trait anxiety, alexithymia and the representation chorioretinopathy in patients with CSC.

2. METHODS

Participants
The sample of patients was recruited from the Clinic of Vitreo-Retinal Diseases at the University Hospital of Messina. We examined 10 subjects, 9 men and 1 woman, mean age 43. Selected patients had a diagnosis of CSC confirmed by fluorescein angiography and OCT, were treated with beta-blockers, and one patient had had previous laser photocoagulation.

Tools
Eye examination was performed, and subsequently the patient was referred to the service of Clinical Psychology for the survey, at the Policlinic Hospital of Messina, Italy. Was made an interview to identify stressors, both as life events, either as a condition inherent in the cross-environmental context. Subsequently the protocol was carried out testologico.

The protocol includes 2 scales in self-evaluation and administration of the Rorschach test. The Rorschach (Hermann Rorschach, 1921), is a tool for the investigation of projective personality. It consists essentially of 10 tables, each of which is accompanied by an ink stain symmetrical: 5 monochrome, 2 and 3 two-tone color. The boards are brought to the attention of the subject one at a time, and for each and no time limit imposed, you are asked to express everything which resembles the table, according to the subject.

The interpretation of the answers given to each table it is possible to study various aspects of the personality of an individual and the internal representation (Passi Tognazzo D., 1994; Settineri S, Mento C., 2010). The rating scales is: the Toronto Alexithymia Scale (TAS) of Taylor, a self-assessment questionnaire to 23 items that detects the presence of alexithymic characteristics, and the State-Trait Anxiety Inventory - Form Y of Spielberger a tool designed to detect and measuring anxiety, and the Rorschach test.
3. RESULTS

During the interview, there was no evidence specific stressful life events in the six months prior to the onset of eye disease. However, almost all of the subjects relate to live an environmental situation they define as "stressful". In relation to the small number of subjects in the sample was made an assessment of interpretation. For the evaluation of Rorschach test in particular have been taken into consideration indices such as the determinants and the content of the responses. The scores on scales of anxiety state and trait, reveal scores in the normative range. In relation to alexithymia, are observed average scores.

**Tab. 1** Scores on rating scales.

<table>
<thead>
<tr>
<th>STAI-Y1</th>
<th>Y2</th>
<th>TAS</th>
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Legend: STAI and TAS rating scale.
**Fig. 1** Determinants to Rorschach test.


**Fig. 2.** Comparison between determinants form and movement (Rorschach test).

Fig. 3 Contents (Rorschach test).

Legend: U: Human; Ud: Human details; (U: humanoid, (Ud): humanoid detail; A: animals; Ad: animals details; skin, botanical, geographical, fire, sexual, artistic, inanimate.

4. DISCUSSION

In the interpretation of protocols can be observed to psychological aspects. The aspects near to normal concern the total F (responses) in percentage, i.e. 70%. It follows that the representation is close to the normal canons of construction of the Form. However, this approach corresponds to a discrete imprecision arising from the rigidity of the form that does not have characteristics of plasticity, as occurs in normal, as may be evident by the presence of the human and animals contents (U, A). In addition, the fall of the percept since the F- (33% of cases) is an expression of this trend (Fig. 1).

On the psychodynamic level, this corresponds to a rigidity structure of personality, which although not typical of those obsessive, implies a lack of mobility and the use of defense mechanisms to the spectrum neurotic.

The problem observed is that of not knowing integrate aspects of emotion and cognition. The emotional aspects are likely to have maladjusted (CF = 6%, FC = 3%). Very high is the presence of pure color responses (C = 4%) as an index of impulsivity, which in our subjects not correspond to a
significant psychopathology as a tendency inherent an impulsive trait (Fig.2). The presence of movement perceptions (M) implies the tendency to internal construction, self-reflective (Fig.2). Irrelevant is the index of inhibition (FM = 2%). Trait of anxiety persist in the anatomical content (monochrome). In relation to this, you can probably conflicting in relation to interpersonal dynamics, observed in poor perception of human figures (U) in contrast to a high perception of animal (A). Further characteristics of anxiety are possible in reference to particular phenomena of shock (shock to dark or red). On the emotional side protocols are obvious signs of depression (devitalizations). These phenomena may identify a problem related to the integration of the aggressive drive, which correlates with personality studies on Type A in patients with CSC (Rupert et al., 2007).

Conclusions

Eyes are important sense. See means to be conscious of the world. The eye has real and symbolic meanings. This psychological study of eye disease is important because it investigates the perception and thus the construction of the world. In this study has combined rating scales and projective personality assessment for emotional aspects in patients with eye disease. From the results obtained in the tests is possible to understand how the behavior is variable in relation to the test: in the scores of the scales, the subjects were able to control their emotions and their perception of emotions, thus obtaining scores in the norm. This control is not possible with the projective test (Rorschach): emerging neurotic defenses, signs of anxiety manifests and not constrained (ChoF, FCho, Cho).

Would be appropriate in relation to the data obtained from this study, suggest a psychological support targeted to develop a link between the cognitive aspect and the emotional aspects.
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