1.2 Summary

Background: Although it has been described in literature, impaired vision due to psychosomatic causes in paediatric and adolescent medicine still demonstrates a problem for a physician concerning diagnosis and treatment of these patients.
This thesis aims at underlining the complexity of this topic by giving examples for the clinical development of such case histories and the treatment of this special patient population. This is done by describing different patient histories, comparing the affected patients among each other and pointing out possible solutions that have been found for each individual patient.

Patients and Methods: The group of patients consists of 45 children and adolescents aged 5-20 years (at the time of first presentation). All have been diagnosed with functionally impaired vision by detailed examinations.
The study data consist of: gender, age, visual acuity, morphology of the anterior part of the eye, macula, papilla/ optic nerve as well as the periphery of the ocular fundus, visual fields, colour vision, stereo vision, VEP, ERG, complaints, duration of the complaints, cause and activator of the complaints, anamnesic evaluation classified in previous illness and accompanying diseases, former evaluations, noticeable school problems, family characteristics and recent diagnostic findings. The data have been identified on the basis of patient files and standardised questionnaires which have been sent to the families.

Results: There were 35 girls (77.8 percent) and only 10 boys (22.2 percent). The age span varies from 5 to 19 years, with a peak at the 8-12 year olds. It turned out that the boys have been affected mainly as children (< 12 years, 70 percent), whereas the girls show a balanced affection: adolescents (>12 years, 54,3 percent).
Median visual acuity in far distance (n=45) was ≤ 0,3 in 8 children, 0,3 to ≤ 0,6 in 11 children and > 0,6 in 26 children. Median visual acuity in near distance (n=42) was ≤ 0,3 in 9 children, 0,3 to ≤ 0,6 in 2 children and >0,6 in 31 children.
The morphology of the anterior segment of the eye (n=45) was without pathologic findings in 37 children, with borderline values in 6 children and pathologic in 2 children.
The morphology of the macula (n=45) was without pathologic findings in 42 children, with borderline values in 2 children and pathologic in 1 child.
The morphology of the papilla/optic nerve (n=45) was without pathologic findings in 43 children and borderline values in 2 children.

The morphology of the periphery of the ocular fundus (n=45) was without pathologic findings in 44 children and pathologic in 1 child.
The visual fields (n=28) were without pathologic findings in 13 children, borderline in 5 children and pathologic in 10 children.
Colour vision (n=15) was normal in 8 children, with borderline values in 5 children and pathologic in 2 children.
Stereo vision (n=40) was without pathologic findings in 34 children, doubtful and conflicting in 4 children and pathologic in 1 child; 1 could not perform the test.
The VEP (n=20) was without pathologic findings in 19 children, in 1 child, the test could not be done.
The ERG (n=7) was without pathologic findings in 5 children and pathologic in 2 children.
The symptoms described were in the first place loss of visual acuity (n=32), followed by visual field constriction (13) and headaches (13), followed by disturbed stereo vision (9), pain at/in the eye (8), glare sensitivity (5), others (5) and colour vision disturbances (4).
The duration of the symptoms (n=28) was predominantly between 1 week and 6 months (21 patients).
The underlining problems (n=33) were found to be in the family (13), followed by problems in the academic area (11), a combination of both (3) or others (6).
The activator of the symptoms (n=21), intensifying the situation, was primarily to be found in the academic area (10 children), followed by accompanying diseases (4), crisis in the relationship of the parents (2), in the circle of friends (2), death within the family (1) stress in the family (1) or sexual abuse (1).
Previous illness and accompanying diseases were very variable and are explained in more detail in the text.
First medical consultations took place at the local ophthalmologist (8 children), followed by imaging examinations of the head (4), other clinical examinations (4), psychological examinations (3) and alternative methods (1).
Academic problems expressed themselves above all as academic failures (6 children), followed by social problems with classmates/teachers (5)/(5), change of school/school enrollment (5), problems with learning (2) and other issues (2).
Familial problems were mainly divorce of the parents (9 children), followed by sexual abuse (4), a diseased sibling (2), overprotection (2) and others (1).

The therapy was predominantly psychotherapeutic (21 times), followed by ophthalmologic treatment (spectacles, eye drops etc.) (20), placebo therapy (16) and other clinical (5) as well as alternative measures (2).
The course and the final findings (n=25) showed that 9 children were symptomless, in 15 children, the symptoms improved and 1 child still suffered from the symptoms.

Conclusion: Overall, the histories of the patients are very individual and variable. It is not possible to give a "standardized" clinical picture in psychosomatic vision disorders. The first hint for the suspicion of a psychosomatic event mostly is the discrepancy between the subjective statements of the patients and the objective test results. Important is the exact evaluation prior to the diagnosis, based on detailed and carefull talks, as this is the only way to reveal the background of a patient. It appeared, -unrelated to the symptom characteristics-, that the most effective treatments were psychotherapy and the attention to the child, sometimes with, sometimes without the help of placebo ocular medications.