

# Behavioral Disorders among Children

by Peter Smrz, M.D.

Key words: behavioral disorders among children, hyperactive children, homotoxicology during childhood and adolescence, pediatrics.

## Summary

For some time now, considerable attention has been directed to the topic of behavioral disorders among children. Professional discussion of juvenile behavioral disorders nowadays includes terminology involving hyperactivity, psycho-organic syndrome, minimal brain dysfunction, and phosphate sensitivity. Various possibilities have been applied for classification of behavioral disorders among children.

The physician would of course be poorly advised to neglect the etiological factors of psychic stress and adverse social environment which are often associated with the children suffering from behavioral disorders. Recent studies, however, have demonstrated that conditions of stress, malnutrition, harmful environmental influences, illnesses, prenatal impressions and the like can additionally lead to dysequilibrium in metabolic processes. In the sense of Hans-Heinrich Reckeweg's work, these developments involve the excessive accumulation of homotoxins. The existence of such metabolic dysequilibrium has definitely been demonstrated to be causally related to the symptoms typically associated with juvenile behavioral disorders. In accordance with this standpoint, a breakdown of causal factors among the following groups may be beneficial.

1. Hyperglycemia (premature cell insufficiency).

2. Heavy metal burdens in the form of lead (with hyperactivity, reduction in acuity and in persistence of concentration, etc) and mercury (with neurotoxic effects and deposition of the metal in nerve tissues and brain).

3. High aluminum levels (with epileptogenic effects).

4. Disorders in prostaglandin biosynthesis and omega-6 fatty acids (with disturbances in behavior).

5. Biochemical disturbances (associated with schizophrenia).

6. Phosphate sensitivity (can also lead to behavioral disorders).

7. Application of antibiotics (with resulting damage to intestinal flora, impairment of immunity, sensitization of mucous membranes, alteration in the pH of the intestinal milieu and development of candida infections).

8. Television.

This presentation offers possibilities of therapy, especially with biotherapeutic/antihomotoxic medication, for each of these problem areas.

For some time now, considerable attention has been directed to the topic of behavioral disorders among children, both in medicine and among parents and teachers. These behavioral problems are described using terms such as "hyperactivity, psycho-organic syndrome, minimal brain dysfunction and phosphate sensitivity". There are various ways of classifying behavioral disorders in children. Just how broad the clinical picture of a child with behavioral disorders can be is shown by a classification according to symptoms (1):

1. Disorders of fine and simple motor skills such as writing, fastening shoes, games of skill, etc.

2. Attention disorders, e.g. only short concentration times possible, major fluctuations in performance, excessive urge for movement.

3. Personality disorders, e.g. aggressiveness, impulsiveness, quick irritability, hyperactivity, anxiousness etc.

The following therapeutic possibilities are used in traditional medicine:

1. Psychological drugs.

2. Amphetamines such as AN 1 and Captagon; the way these work in these cases is paradoxical.

3. Psychotherapy.

4. Sport, e.g. judo, riding, swimming.

I would like to add the possibility of biological treatment to this list of possibilities.

Naturally, the psychic stress which the social environment lays on the child should not be neglected as a cause here but, on the basis of recent studies, it can be demonstrated that conditions of stress, dietary deficiencies, environmental influences, illnesses, prenatal influences, etc., can lead to metabolic imbalances (both deficiencies and overloads). The Chinese used to say that a shift in the Yin-Yang balance leads to illness.

In the context of Reckeweg's teachings, there is an accumulation of homotoxins.

The presence of metabolic imbalances of this kind can clearly have a causal connection with the symptoms mentioned. Accordingly, the following sets of causes can be distinguished, and combinations are frequent:

1. Hyperglycemia.

2. Heavy metal burdens (lead, mercury, cadmium, etc).

3. High aluminum levels.

4. Disorders in prostaglandin biosynthesis and omega-6 fatty acids.

5. Schizophrenia, which can be subdivided as follows:

a) Histapenia (low histamine level in the blood, high copper level in the serum).

b) Histadelia (high histamine level in the blood).

c) Pyrroluria (malven factor in the urine).

d) Cerebral allergy (food intolerances).

6. Phosphate sensitivity.

7. Antibiotics.

## Hyperglycemia

In around 80% of children with behavioral disorders, hyperglycemic conditions may be the cause, or one of the causes, of the problem (2). If one takes the trouble to ask the mother about the eating habits of her children, in many cases it can be observed that there is an excessive consumption of carbohydrates. White flour in the form of pizzas, noodles, cakes, and especially sugar, which is often concealed in various food products such as ketchup, cola, mustard, etc., causes drastic disorders in the hormone structure. Each intake of carbohydrates, particularly isolated sugar which is quickly absorbed, requires a disproportionately high discharge of insulin. Insulin, as an anabolic hormone, controls not just sugar elimination from the blood, but also fatty cell synthesis; in other words, any carbohydrate which is not burnt up is stored as fat.

Since the organism is constantly striving to achieve an even hormonal balance due to continuous discharge of insulin, other anabolic hormones must be shut down. This means that STH (growth hormone) and testosterone are curbed accordingly. As these hormones are responsible for cell rejuvenation, this therefore causes premature cell insufficiency (3).

Therapeutically, a change in diet is the first thing to be done:

1. High-value foods (a large proportion of raw foods: not cooked in any way, without preservatives).

2. Eliminate or reduce sugar, white flour, pork.

3. Medications: Horneel, Hypothalamus suis-Injeel, Hypophysis suis-Injeel, Magnebolan.

4. Restoration of intestinal flora with Biobolan and Mutaflor, Nux vomica-Homaccord (4).

## Heavy metals

What has been to date an unrestrained, short-sighted, and purely profit-oriented economy has meant that environmental pollution has brought the earth to the limit of its survival. We must come to terms with heavy metals as a frequent pathological factor in diagnosis and treatment. Heavy metals, even in sub-minimal doses, produce psychic modifications - especially in children. Furthermore it should be noted that, with high levels of heavy metals, the presence of a number of toxic elements can have a potentizing effect (5).

## Lead

A high intake of lead in nursing babies via the mother's milk can cause hyperactivity (6, 7, 8). Lead intake has a detrimental effect on learning capacity in the first two to three years of life (9, 10, 11, 12, 13, 14).

Other studies prove that lead has a neurotoxic effect on the organism, even in low concentrations (15, 16, 17, 18, 19).

Similar results have been produced in works in which the lead levels in the dentine of children were measured. This enabled a clear connection to be established between the extent of the lead concentration and the behavior of the child in school. Modifications were found in performance at school, ability to concentrate, perseverance, daydreaming, obedience, ability to make friends (20, 21).

The treatment concept consists of:

1. The administration of calcium and zinc and antagonists (Zinkorotat) (22, 23).

2. The administration of amino acids containing sulphur (Superbolan).

3. Vitamin C, 1/2-1 gram per day (hydroxilation reaction of heavy metals and hence water solubility).

4. Coenzyme compositum, Ubichinon compositum, Cuprum-Injeel (fidgeting infants), Acidum phosphoricum-Injeel, Cerebrum compositum (learning difficulties).

## Mercury

One of the most common sources of exposure to mercury must be amalgam fillings. Scientific discussions may swing this way and that but the therapeutic success achieved in practice cannot be gainsaid (24).

Mercury is absolutely neurotoxic and is stored particularly in the nerve tissue and the brain. Detection in the blood is not very useful unless elimination has been previously forced with a chelate producer such as Dimaval. The presence of amalgam - or mercury - poisoning can be proved by a simple chewing gum saliva test.

The treatment concept consists of:

1. Short or long term amalgam removal, replacement with gold.

2. Selenium (Selenbolan), zinc (Zinkorotat), Magnebolan.

3. Vitamin C.

4. Galium-Heel, Lymphomyosot, Scordal, as a combination.

5. For high levels, administration of: Coenzyme compositum, Ubichinon compositum, Hepar compositum.

## Aluminum

After oxygen and silicon, aluminum is the third most common element in the earth's crust. As a consequence of air pollution and acid rain, the pH value in the earth changes, and hence the solubility ratios for aluminum compounds also change, which means that plants have higher concentrations of aluminum - which means that aluminum finds its way into the food chain. Additional possible sources of aluminum are, among others: Aluminum cooking utensils, aluminum foil, deodorants, emissions from the aluminum industry, antacids.

The epileptogenic effect has been known for a long time. High aluminum values disrupt the balance between Ca, Mg and P. Since aluminum does not chelate in the same way as mercury and lead - in other words it does not form a compound - it cannot be flushed out with Dimaval, for example (25).

**Treatment plan:**

1. Calcium and magnesium as aluminum antagonists (Magnebolan).

2. Vitamin B6.

**Prostaglandin biosynthesis, omega-6 fatty acids**

Some authors say that factors which disrupt prostaglandin biosynthesis are also not tolerated by hyperactive children or that these factors can lead to behavior modifications (such as hyperactivity, concentration disorders). Among these disruption factors are: alcohol, saturated fats, sugar, food additives, salicylate and foods containing salicylate (such as almonds, apples, apricots, berries, cherries, grapes, oranges, peaches, plums, cucumbers, tomatoes etc), cortisone, opiates (e.g. codeine), zinc deficiency, magnesium and vitamin B6 deficiency (26, 27, 28).

It seems that these factors severely inhibit prostaglandin synthesis where there already is a low gamma linoleic acid level.

**Treatment:**

1. Evening primrose oil (Epogon), 2 x 500 mg capsules 3 times a day (2-3 months).

2. Zinc (Zinkorotat), magnesium (Magnebolan), vitamin B6.

With neurodermatitis, too, there is sometimes a disruption in the synthesis of prostaglandin; here again evening primrose oil proves to have a good effect. But food allergies should also be considered here. Table 1 shows where intolerances produce the respective allergic reactions.

Where there is a known family history, a venous blood sample should be taken from the umbilical cord of newborn babies in order to measure the IgE level, which enables a reliable prognostic statement to be made with respect to expected atypical illnesses. The child should be breast fed for as long as possible, as this is the best protection against the first signs of neuro-dermatitis. One should be cautious in giving the child cow's milk; sheep's or goat's milk is

- |  |
|--|
| 1. Skin: e.g. acute dermatitis, urticaria, eczema.   |
| 2. Mucous membrane: conjunctivitis, rhinitis, swellings of the mucous membrane of the lips and mouth with itching and burning, edema of the pharynx, bronchial asthma, nausea, gastritis, enteritis with diarrhea, vomiting. |
| 3. Heart-circulation: tachycardia, circulatory collapse, anaphylactic shock, heart-circulation failure, vascular spasm (e.g. migraine), edema of the lymph glands.   |
| 4. Nervous system, psyche: behavioral disorders, regulation disorders in the intermediary circulation and many more.   |

Table 1: The manifestation of intolerances. preferable. The so-called hypo-allergenic milk powders sold by the foodstuffs industry can be of advantage in some cases.

With these special milk preparations, there are stages in the breakdown of the milk in the form of long-chain amino acids, cattle serum, soya, etc.; i.e. substances which can also have allergenic effects (e.g. Pregomin from Milupa, Humana, Humana SL, Pregestimil), injections with Cutis compositum, milk extract alternating with thymus extract have proved to be helpful with dermatitis. Additional preparations which regulate intestinal flora such as Biobolan, Mutaflor (29) are necessary.

**Schizophrenia**

In the Brain Biocenter clinic which he founded in New Jersey, Pfeiffer was able to show that schizophrenia is based on biochemical disorders (30).

A summary is given in Table 2.

	Histapenia	Pyroluria	Histiadella	Cerebral allergy
Anamnesis	No family history Hallucinations Paranoia Slower orgasm Numerous tooth fillings Stalagmitic adiposities	Family history Paleness White nails No breakfast Amenorrhea No memory of dreams Breath and body odor Abdominal pains Impotency Anemia Poor tooth enamel	Family history Suicidal depression Obsessional acts High pain sensitivity Vacancy of mind Good teeth Allergies Headaches	Family history Infantile eczema Coeliac disease Allergies Daily mood changes Improvement when fasting
Laboratory findings	Serum copper high Histamine in blood low Copper in hair high	Crypto-pyroluria in the urine high Serum zinc high or low Zinc in hair high or low	Histamine in the blood high Serum copper normal	Histamine in the blood low Fast pulse rate Provocation test Skin test 4-day elimination diet Journal of foods eaten and symptoms 4-day fasts
Therapy	Avoid Niacin Folic acid Vitamin B6 Pantothenate Zinc + Manganese Molybdenum Copper  40% histapenia	Vitamin B6 Zinc + Manganese      30% pyroluria	Calcium Methionine Zinc + Manganese Molybdenum Poss. Diphenylhydantoin  20% histadella	Eliminate antigens Vitamin B Vitamin C Calcium Potassium, zinc and manganese  10% cerebral allergy

Table 2: A summary of forms of schizophrenia (Journal "Erfahrungsheilkunde" No. 4, 1992)

## Phosphate sensitivity

A phosphate-controlled diet in many cases seems to produce a drastic improvement; this should not however lead to the erroneous assumption that it is phosphate exclusively which causes the behavioral problems listed (31, 32, 33).

## Antibiotics

The careless and all-too-easy use of antibiotics with children and young people leads to the person concerned developing disorders in the intestinal flora, with a modification in the immunity and a sensitisation of the mucous membrane, a modification in the pH value in the intestinal milieu and hence to a disruption in the biosynthesis of products which depend on the intestinal flora, such as B-vitamins, vitamin K, and others. As the intestinal flora, with a surface of 400 m<sup>2</sup>, is the most important element in basic health, a considerable treatment plan is necessary here.

### Treatment:

1. Change diet (fresh food, lactic acid products).
2. Change pH level with Nux vomica-Homaccord and Veratrum-Homaccord.
3. Intestinal bacteria (Biobolan).
4. Intestinal detoxification with Hepar compositum, Lymphomyosot and Galium-Heel.
5. Nosode therapy: Coxsackie-Virus-B4-Injeel and A9-Injeel, Erythromycin-Injeel, Insecticide-Injeel.

## Television watching

Television watching must be adapted to age (content, length of time).

### Literature:

1. Zanini GM. Schweiz. Apothekerzeitg. 1987; 125: 434-437.
2. Schurgast H. Orthomolekulare Medizin. Schweizer Zschr. GanzheitsMedizin 1990; 6: 305-311.

3. Smrz P. Topfit durch Bio-Doping. Hippokr. Akademie-Verlag 1989.

4. Smrz P. Essen als Chance. Holzmann-Verlag 1992.

5. Perger F. Somatopsychische Veränderungen durch Schwermetallbelastungen. in natura. 3/88.

6. David O, et al. Lancet 1972; 2: 900-903.

7. Golter M, Michaelson IA. Science 1975; 187: 359-361.

8. Silbergeld EK, Goldberg AM. Exp. Neurol. 1974; 42: 146-157.

9. Carson TL, et al. Arch. Environ. Health 1974; 29: 154-156.

10. Brown DR. Toxicol. Appl. Pharmacol. 1975; 32: 628-637.

11. Mariowe M, et al. J. Learning Disabilities 1984; 17 (7): 418-421.

12. Rimland B. J. Learning Disabilities 1983; 16 (5): 279-285.

13. Pihl RO, Parker M. Science 1977; 198: 204-206.

14. Thatcher RW, Lester ML. J. Learning Disabilities 1985; 18 (5): 287-297.

15. Hansen ON, et al. Proc. Int. Conf. Heavy Metals Environment, Edinburgh: CEP Consultants, Athens 1985; 51-53.

16. Winneke G, Hrdina K, Brockhaus A. Int. Arch. Occup. Env. Health 1982; 51: 169.

17. Hatzakis A, et al. Proc. Int. Conf. Heavy Metals Env., Edinburgh: CEP Consultants, Athens 1985: 47.

18. Hawk BA, et al. Proc. Int. Conf. Heavy Metals Env., Edinburgh: CEP Consultants, Athens 1985: 38-40.

19. Valciukas JA. Science 1978; 201: 465-467.

20. Needleman HL, et al. New Engl. J. Med. 1979; 300: 689-695.

21. Needleman HL. Technol. Rev. 1980; March/April: 39-45.

22. Papaioannou R, Sohler A, Pfeiffer CC. Orthomolecular Psychiatry 1978; 7: 94-106.

23. El-Gazzar R, Finelli VN, Bojano J, Petering, HG. Toxicolog. Letters 1978; 227-234.

24. Smrz P. Amalgam, die verharmlöse Zeitbombe. Hippokrates Akademie, 1989.

25. Howard JMH. Clin. Chem. 1974; 30(10): 1722-1723.

26. Fingold BF. Why your child is hyperactive. Random-House, New York.

27. Cott. A. Help for Your Learning Disabled Child. Times Book, Random House, New York 1985.

28. Cott A. The orthomolecular approach to learning disabilities. Academic Therapy Publications, San Rafael, California 1977.

29. Gurning H. Allergie und Ernährung. Der Deutsche Dermatologe 12/91.

30. Burgerstein L. Heilwirkung von Nährstoffen. Karl F. Haug Verlag, Heidelberg 1991; 235.

31. Hafer H. Die unheimliche Droge Nahrungsphosphat -Ursache für Verhaltensstörungen, Schulversagen und Jugendkriminalität. Kriminalistik-Verlag Heidelberg 1986.

32. Schweiz. Phosphätliga. Lebensmittelliste für die phosphatreduzierte Ernährung; Bollingen 1986.

33. Abert S. Erfahrung über Phosphat-reduzierte Kost. Westfal. Landeskassenkasse Haard, 1987.

Address of the author:

Peter Smrz, M.D.  
Neu Strasse 125  
89073 Ulm  
Germany