

INFLUENCE OF PERSISTING PRIMITIVE REFLEXES ON THE EXPRESSION OR TRIGGERING OF TIC DISORDERS OR TOURETTE

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Background

For more than 30 years we have seen many patients with tic disorders or Tourette's syndrome in our social psychiatric practice.

At the same time, we now routinely record the persistence of early childhood reflexes that influence affect, concentration, sensorimotor skills and motor development.

It is known that a high level of inner tension or an unstable emotional state contribute to the triggering of tics or lead to an increase in tics.

The question was, whether working on persistent reflexes can contribute to an improvement in tic disorders.

Keywords

Tic Disorder; Tourette Syndrome; OPATUS CPTa®; PPR; Persisting preborn reflexes; RIP®.

Abbreviations

TS -Tourette Syndrome
TD - Tic Disorder
CPTa - Continuous Performance Test (plus activity)
PPR - Primitive Preborn Reflexes
RIP® - Reflex Integration Program
TAU - Treatment As Usual.
MORO - MORO-Reaction
ATNR - Asymmetric Tonic Neck Reflex
STNR - Symmetric Tonic Neck Reflex
TLR - Tonic Labyrinth Reflex
SG - Spinal Galant

Today's view on TS

Even though considerable progress has been made in research into Tourette's syndrome in recent years, the cause is still unclear.

Although it can be considered certain that Tourette syndrome is a hereditary disease, no underlying genetic defect has yet been proven.

Results from imaging studies confirm the assumption that there is a malfunction in the control circuit of the brain involving the so-called basal ganglia - a region in the brain that is significantly involved in movement coordination.

Mostly, a disorder in the dopaminergic neurotransmitter system is suspected. However, changes in various other neurotransmitter systems of the brain are also repeatedly detected, so that it is speculated that these are also involved in the development of Tourette's syndrome. (1)

Against this background, a dysbalance between inhibitory and stimulatory interneurons in the striatum appears to be a probable. The decrease in inhibitory activity from the striatum to the thalamus could play a decisive role. However, it is assumed that this also represents only one part of a complex control circuit on different levels of control circuits. There have been numerous studies on this since 2000.

Other studies have shown that psychosocial stress, medication, smoking, alcohol consumption and other drugs during pregnancy are associated with the occurrence of tics in the child. (2)

More rarely: Tic disorders can possibly be triggered or even caused by the consequences of bacterial infections with streptococci (e.g. otitis media, scarlet fever, tonsillitis). Especially if there is a close temporal proximity between the infection and the occurrence of tic disorders, a connection is likely. (2)

A possible connection between deviations in the immune system and disorders in brain development, which could lead to an increased risk of developing Tourette's syndrome, has been investigated for many years. So far, however, there are no firm findings on this. (3)

Tics, unlike other movement disorders, can be suppressed voluntarily, at least for a short time. This ability increases with age from child to adult.

According to recent research, this ability seems to correlate with the ability of interoception (part of perception that refers to perceptions of one's own body). (4)

There is also the theory of "habit formation" - tics as overlearned motor elements and the "theory of event coding" theory, which assumes a disturbed coupling of perception and action. (5)

This last theory, event coding and interoception, is basis of our thoughts on a connection between prenatal or birth stress, resulting in persistence of early childhood reflexes, difficulties in body self-awareness and a trigger to tic disorders.(6-11)

Methods

As part of the initial neurological examination, an approx. 2–3-minute screening for persistent reflexes is carried out after RIP®. ATNR, STNR, SG, TLR and MORO are recorded. (7, 8,9)

The examination includes the general neurological examination and, in the case of a tic disorder, the recording and description of motor and vocal tics as well as special attention to hypersensitivity, stimulus openness in certain perception channels as well as additional examinations of the psychiatric status, cognition and concentration.

Additional technical examinations include (age-adjusted) tests for cognition, the OPATUS CPTa and projective methods. (12)

In the case of the persistence of early childhood reflexes, a neurophysiological exercise program is instructed, which is carried out by the client or together with partners or parents for 10-15 minutes a day.(8,9)

Accompanying exercise instructions are coordinated at intervals of 4-6 weeks.

Medical checks take place every 3 months and record changes in the above parameters. If additional tic medication is required, a decision is then also made about dose adjustments, which necessitate a lowering of the dose if the stress and tic reduction is successful.

Results and Conclusions

Parallel to the reduction in persistent reflexes, we usually also observe a reduction in the intensity of the tic and the level of suffering.

Correspondingly, comorbidities such as disorders of social behavior and concentration decrease.

Medications can be avoided in milder cases or reduced in dose more quickly.

This relates to both specific tic medications and medications for comorbidities.

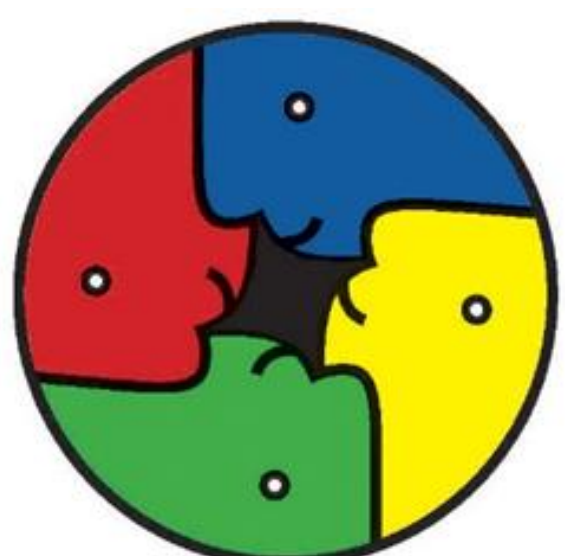
Discussion

In addition to standard treatments such as HRT, psychomotor approaches are also effective in many cases and we recommend regular screening for persistence of early childhood reflexes at the beginning of tic treatment, which are more causal than behavioral and/or relaxation therapy approaches. (11)

Further research is needed to provide a wider range of supportive therapy options.

References

1. <https://tourette-gesellschaft.de/ursachensymptome/>
2. <https://www.neurologen-und-psychiater-imnetz.org/children-adolescents-psychiatripsychosomatics-and-psychotherapy/stoerungenerkrankungen/tic-stoerungen/tourette-syndrome/causes-risk-factors>
3. D. Martino, P. Zis, M. Buttiglione: The role of immune mechanisms in Tourette syndrome. In: Brain research. Vol. 1617, August 2015, S. 126-143, DOI:10.1016/j.brainres.2014.04.027, PMID 24845720.
4. M. Kleimaker et al. Pathophysiology of Gilles-de-la-Tourette syndrome. DOI: <https://doi.org/10.1055/a-1095-5146>, Neurology 2020: 39:291-299
5. B. Homme et al.: The theory of Event Coding (TEC): a framework for perception and action planning. Behav Brain Sci 2001: 24 (5): 849-878
6. Meyers R, ADHD is curable, 2021, ISBN-13: 979-8404994049
7. Meyers R, Live or die – Persisting reflexes may cause emotional problems or ADHD - Volume 1, 2021, ISBN-13: 979-8583766956
8. Meyers R, Hohmann R, (Über)Leben mit Reflexen - Volume 2, Reflex Integration Program RIP®, ISBN-13: 979-8535058535 (German Edition)
9. Meyers R, Hohmann R, (Over)Living with Reflexes, RIP Reflex Integration Program, ISBN-13: 979-8385818709 (English Edition 2023)
10. Meyers R, Autism (ASD) – New views on neurodiversity, 2022, ISBN-13: 979-8370018312
11. Meyers R, Tourette-Syndrom verstehen und ganzheitlich behandeln, Ein Plädoyer für Akzeptanz und Teilhabe, to be published by Kohlhammer ca. 9.23
12. Meyers R, OPATUS CPTa, 2022, ISBN-13: 979-8847115193



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