



# Der Merkurstab

Zeitschrift für Anthroposophische Medizin  
*Journal of Anthroposophic Medicine*

Themenschwerpunkt: Schlaf und Schlaflosigkeit

• *Matthias Girke, Georg Soldner*  
Editorial

## Originalia

• *Matthias Girke*

Die geisteswissenschaftliche  
Bedeutung des Schlafs

• *Matthias Kröz, Danilo Pranga,  
Roland Zerm*

Zur Diagnostik und Therapie  
der chronischen Insomnie

• *Volker Fintelmann*

Wege zu einem gesunden Schlaf:  
Schlafstörungen und ihre Therapien

• *Wolfgang Reißmann*

Die Kultur des Schlafens:  
Rückschau, Gebet, Meditation

## Praxis

### Anthroposophische Medizin

• *Astrid Sterner*

Schlafstörungen unter Berücksichtigung  
kosmologischer Zusammenhänge –  
Äußere Anwendungen anhand von  
sieben Fallbeispielen

## Anthroposophische Arzneimittel

• *Vademecum*

– *Markus Karutz, Georg Soldner*  
Einleitung

– Einzelfallbericht:  
Metastasierendes Ovarialkarzinom

• *Ana Paula Simões-Wüst, Angela Kuck,  
Ursula von Mandach*

Sedierende und antihistaminische  
Wirkungen von *Bryophyllum pinna-*  
tum: Implikationen für die Behandlung  
von Schlafstörungen und Allergien

• *Claudia Rother, Martin Schnelle*  
*Cardiodoron®* bei Patienten mit  
Schlafstörungen – Ergebnisse einer  
prospektiven Beobachtungsstudie

## Wissenschaft und Forschung

• Tagungsbeiträge

## Berichte

• Tagungsberichte

• Im Gespräch

• Aktuelles

• Rezensionen

• Korrigendum

## Rudolf Steiner zum Thema

Licht und Liebe im Schlafzustand  
des Menschen

1/17

# Wissenschaft und Forschung

## Tagungsbeiträge

### Abstracts der Vorträge und Poster der Jahreskonferenz der Medizinischen Sektion am Goetheanum, 15.–18.09.2016

#### 1 | ADHD and cerebellar vermian tumor: sensory and perceptual development through Anthroposophic Medicine and neuroimaging diagnosis

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Edna Marina de Souza (3, 4)

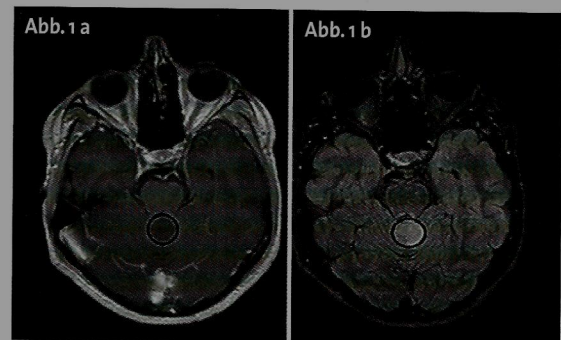
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**Question:** Anthroposophic Medicine shows how perceptual development contributes towards the individual's maturing throughout the seven-year periods. Neuroscience and neuroimaging techniques describe the perceptual phenomenon, mapping its processes in the human body in regards to evolutionary neurological milestones, learn-

ing and memory. Among the existing neuroimaging tools, Diffusion Tensor Images (DTI) are magnetic resonance images (MRI) based on the water molecule displacement in the body, which depends on the constitution, geometry and physiology of the biological tissues. Based on this knowledge, this paper describes a patient presenting Attention Deficit Hyperactivity Disorder (ADHD) and cerebellar vermian tumor, whose DTIs show phenomenological changes, and whose behavioral and learning problems have been treated with anthroposophic constitutional medication.

**Materials and Methods:** A 16-year-old male patient presenting symptoms of hyperkinetic disorder as of age 5, as well as disorganized and excessive motor activity and attention deficit. At age 9, his school and behavioral problems increased, leading to the ADHD diagnostic. The patient did not show communication problems and the electroencephalogram was normal. The treatment with Methylphenidate was inefficient and thus the anthroposophic approach was initiated. Imbalances in developmental forces and rhythms were observed. The recommended action was to reduce media stimuli and the intake of psychostimulant foods, as well as provide support to help overcome his learning difficulties. The biological cycles were controlled and anthroposophic medication used, which improved the clinical condition. During puberty, the patient's behavior worsened despite the improvement of his school performance. A brain MRI with DTI detected a cerebellar vermian tumor, whose properties suggested that it was a



pilocytic astrocytoma, although the patient did not present symptoms of intracranial hypertension or balance problems. DTI were quantified so to characterize the water diffusion patterns in the lesion and surrounding tissues upon diagnosis and one year later, through follow-up images. The figure shows a region of interest on a T2-weighted MRI that highlights the tumor (a) and the DTI-based tract reconstruction (b).

**Conclusion:** The patient has been treated with anthroposophic therapies since age 9. The detected tumor has not shown the aggressive evolution that is typical of astrocytomas. Its diffusion patterns and size has remained unchanged during one year. Spiritual care and neuroimaging techniques advance the understanding of perceptual development and medical procedures.

#### References

- Baldissin M. Percepções humanas: antroposofia e neurociências. São Paulo: Editora Antroposófica; 2014.
- Baldissin M. Percepciones Humanas: antroposofia y neurociencias. Madrid: IAO Arte Editorial; 2014.
- Souza EM, Castellano G, Baldissin MM, Costa ET. Imagens de Ressonância Magnética Ponderadas por Difusão e Mapas de ADC Aplicados ao Estudo de Tumores Cerebrais: atualidades e perspectivas. In: Neurociências e Epilepsia. São Paulo: Plêiade; 2011: 115–120.

**Abb. 1**  
T<sub>1</sub> (a) and  
T<sub>2</sub> (b) FLAIR images  
highlighting the  
tumor area.