

Neuro aktuell

Ausgabe 5-2021

Literatur

Schwerpunkt: ADHS

Titel: „Können Sie sich schlecht entspannen?“ Mind-Body-Techniken in der Therapie von Erwachsenen mit ADHS (S. 7–14)

Autoren: P. Burger, A. Kupfenberg, M. Scholz, J.-P. Schmid, A. Buadze

Literatur:

1. Demontis D et al. Discovery of the first genome-wide significant risk loci for attention deficit/hyperactivity disorder. *Nat Genet* 2019; 51(1): 63–75
2. Hippokrates. *Hippokrates: Sämtliche Werke. Übersetzt und ausführlich kommentiert von Robert Fuchs*. Verlag H. Lüneburg; 1895–1900
3. MA W. Mangel an Aufmerksamkeit – *Attentio volubilis*. *Der Philosophische Arzt Drittes Hauptstück* 1774: 114
4. Crichton A. An inquiry into the nature and origin of mental derangement: on attention and its diseases. *J Atten Disord* 2008; 12(3): 200–204; discussion 205–206
5. Still GF. The Goulstonian lectures on some abnormal psychical conditions in children. *Lancet Psychiatry* 1902: 1008-1012
6. Homburger A. *Vorlesungen über die Psychopathologie des Kindesalters*. Berlin: Springer 1926
7. H. H. *Lustige Geschichten und drollige Bilder für Kinder von 3–6 Jahren*. Literarische Anstalt Frankfurt a. M. 1844
8. Sayal K et al. ADHD in children and young people: prevalence, care pathways, and service provision. *Lancet Psychiatry* 2018; 5(2): 175–186
9. Polanczyk G et al. The worldwide prevalence of ADHD: a systematic review and metaregression analysis. *Am J Psychiatry* 2007; 164(6): 942–948
10. Polanczyk GV et al. ADHD prevalence estimates across three decades: an updated systematic review and meta-regression analysis. *Int J Epidemiol* 2014; 43(2): 434–442
11. Biederman J & Faraone SV. Attention-deficit hyperactivity disorder. *Lancet* 2005; 366(9481): 237–248
12. Masuch TV et al. Internalized stigma, anticipated discrimination and perceived public stigma in adults with ADHD. *Atten Defic Hyperact Disord* 2019; 11(2): 211–220
13. Moldavsky M & Sayal K. Knowledge and attitudes about attention-deficit/hyperactivity disorder (ADHD) and its treatment: the views of children, adolescents, parents, teachers and healthcare professionals. *Curr Psychiatry Rep* 2013; 15(8): 377
14. Kordon A & Kahl KG. Aufmerksamkeitsdefizit-/Hyperaktivitätsstörung (ADHS) im Erwachsenenalter. *PPmP* 2004; 54: 124–136
15. Schneider BA et al. How competing speech interferes with speech comprehension in everyday listening situations *J Am Acad Audiol* 2007; 18: 559–572
16. Ghanizadeh A. Screening signs of auditory processing problem: Does it distinguish attention deficit hyperactivity disorder subtypes in a clinical sample of children? *Int J Pediatr Otorhinolaryngol* 2009; 73: 81–87
17. Lucker JR et al. Perception of loudness in children with ADD and without ADD. *Child Psychiatry Hum Dev* 1996; 26: 181–190
18. Kittel-Schneider S & Reif A. [Adult attention deficit hyperactivity disorder and comorbidity: new findings on epidemiological and genetic factors]. *Nervenarzt* 2020; 91(7): 575–582
19. Edel M & Vollmöller W. *Aufmerksamkeitsdefizit-/Aktivitätsstörung bei Erwachsenen*. Springer 2006

20. Canela C et al. Skills and compensation strategies in adult ADHD – A qualitative study. *PloS one* 2017; 12(9): e0184964
21. Press W. *Internationale Klassifikation psychischer Störungen: ICD–10 Kapitel V (F) – Klinisch–diagnostische Leitlinien*. Hogrefe Verlag 2015
22. Rösler M et al. *HASE - Homburger ADHS-Skalen für Erwachsene*. erste Auflage ed: Hogrefe Verlag 2008
23. *ADHD in Adults – A Practical Guide to Evaluation and Management*. Humana Press - Springer 2013
24. Kooij S. *Adult ADHD*. 3rd edition ed: Springer 2013
25. Catala-Lopez F et al. The pharmacological and non-pharmacological treatment of attention deficit hyperactivity disorder in children and adolescents: A systematic review with network meta-analyses of randomised trials. *PloS one* 2017; 12(7): e0180355
26. Langfassung der interdisziplinären evidenz- und konsensbasierten (S3) Leitlinie „Aufmerksamkeitsdefizit-/Hyperaktivitätsstörung (ADHS) im Kindes-, Jugend- und Erwachsenenalter“ [press release]; DGPPN2017
27. Castells X et al. Relationship Between Treatment Duration and Efficacy of Pharmacological Treatment for ADHD: A Meta-Analysis and Meta-Regression of 87 Randomized Controlled Clinical Trials. *J Atten Disord* 2021; 25(10): 1352–1361
28. Coghill DR et al. Long-Term Safety and Efficacy of Lisdexamfetamine Dimesylate in Children and Adolescents with ADHD: A Phase IV, 2-Year, Open-Label Study in Europe. *CNS Drugs* 2017; 31(7): 625–638
29. Stuhec M. Comparative efficacy and acceptability of atomoxetine, lisdexamfetamine, bupropion and methylphenidate in treatment of attention deficit hyperactivity disorder in children and adolescents: a meta-analysis with focus on bupropion. *J Affect Disord* 2015; 178: 149–159
30. Fredriksen M et al. Long-term efficacy and safety of treatment with stimulants and atomoxetine in adult ADHD: a review of controlled and naturalistic studies. *Eur Neuropsychopharmacol* 2013; 23(6): 508–527
31. Bachmann CJ et al. ADHD in Germany: Trends in Diagnosis and Pharmacotherapy. *Dtsch Arztebl Int* 2017; 114(9): 141–148
32. Wahbeh H et al. Mind-body interventions: applications in neurology. *Neurology* 2008; 70(24): 2321–2328
33. Schultz IH. *Autogenes Training Das Original-Übungsheft*. Trias 2016
34. Kabat-Zinn J. *Gesund durch Meditation: Das große Buch der Selbstheilung mit MBSR*. Knauer Leben 2019
35. Bongartz W & Bongartz B. *Hypnosetherapie*. Göttingen: Hogrefe Verlag für Psychologie 2000
36. Benson H et al. The relaxation response. *Psychiatry* 1974; 37(1): 37–46
37. Komori T. The relaxation effect of prolonged expiratory breathing. *Ment Illn* 2018; 10(1): 7669
38. Bachmann K et al. Effects of mindfulness and psychoeducation on working memory in adult ADHD: A randomised, controlled fMRI study. *Behaviour research and therapy* 2018; 106: 47–56
39. Servant D et al. [Heart rate variability. Applications in psychiatry]. *Encephale* 2009; 35(5): 423–428
40. Stahl JE et al. Relaxation Response and Resiliency Training and Its Effect on Healthcare Resource Utilization. *PloS one* 2015; 10(10): e0140212
41. Calhoun G, Jr. & Bolton JA. Hypnotherapy: a possible alternative for treating pupils affected with attention deficit disorder. *Percept Mot Skills* 1986; 63(3): 1191–1195
42. Raymer R & Poppen R. Behavioral relaxation training with hyperactive children. *J Behav Ther Exp Psychiatry* 1985; 16(4): 309–316
43. Dunn FM & Howell RJ. Relaxation training and its relationship to hyperactivity in boys. *Journal of clinical psychology* 1982; 38(1): 92–100
44. Schmiedeler S. [Mindfulness-based intervention in attention-deficit-/hyperactivity disorder (ADHD)]. *Z Kinder Jugendpsychiatr Psychother* 2015; 43(2): 123–131
45. Xue J et al. A meta-analytic investigation of the impact of mindfulness-based interventions on ADHD symptoms. *Medicine (Baltimore)* 2019; 98(23): e15957

46. Krisanaprakornkit T et al. Meditation therapies for attention-deficit/hyperactivity disorder (ADHD). *Cochrane Database Syst Rev* 2010; 6: CD006507
47. Geurts DEM et al. Mechanisms of Change in Mindfulness-Based Cognitive Therapy in Adults With ADHD. *J Atten Disord* 2021; 25(9): 1331–1342
48. Nicastro R et al. Mindfulness Training for Adults with Attention-Deficit/Hyperactivity Disorder: Implementation of Mindful Awareness Practices in a French-Speaking Attention-Deficit/Hyperactivity Disorder Unit. *J Altern Complement Med* 2021; 27: 179–183
49. Hoxhaj E et al. Mindfulness vs psychoeducation in adult ADHD: a randomized controlled trial. *Eur Arch Psychiatry Clin Neurosci* 2018; 268(4): 321–335
50. Janssen L et al. Mindfulness-based cognitive therapy v. treatment as usual in adults with ADHD: a multicentre, single-blind, randomised controlled trial. *Psychol Med* 2019; 49(1): 55–65
51. Heparik S et al. The Efficacy of Adapted MBCT on Core Symptoms and Executive Functioning in Adults With ADHD: A Preliminary Randomized Controlled Trial. *J Atten Disord* 2019; 23(4): 351–362
52. Converse AK et al. Tai Chi training for attention deficit hyperactivity disorder: A feasibility trial in college students. *Complementary therapies in medicine* 2020; 53: 102538
53. Pheh KS et al. Effectiveness of Online Mindfulness-Based Intervention (iMBI) on Inattention, Hyperactivity-Impulsivity, and Executive Functioning in College Emerging Adults with Attention-Deficit/Hyperactivity Disorder: A Study Protocol. *Int J Environ Res Public Health* 2021; 18(3)
54. Oliva F et al. The efficacy of mindfulness-based interventions in attention-deficit/hyperactivity disorder beyond core symptoms: A systematic review, meta-analysis, and meta-regression. *J Affect Disord* 2021; 292: 475–486
55. Poissant H et al. Behavioral and Cognitive Impacts of Mindfulness-Based Interventions on Adults with Attention-Deficit Hyperactivity Disorder: A Systematic Review. *Behav Neurol* 2019; 2019: 5682050
56. Lotan A et al. Methylphenidate facilitates hypnotizability in adults with ADHD: a naturalistic cohort study. *The International journal of clinical and experimental hypnosis* 2015; 63(3): 294–308
57. Kupferberg A et al. Computergestütztes kognitives Training bei ADHS. *HNO Nachrichten* 2020; 50: 26–31
58. Cortese S et al. Cognitive training for attention-deficit/hyperactivity disorder: meta-analysis of clinical and neuropsychological outcomes from randomized controlled trials. *J Am Acad Child Adolesc Psychiatry* 2015; 54(3): 164–174

Schwerpunkt: Multiple Sklerose

Titel: Symptombesogene Therapie der multiplen Sklerose – eine Zusammenfassung der Leitlinienempfehlungen 2021 (S. 16–22)

Autoren: P. Flachenecker, T. Henze

Literatur:

1. Henze T et al. Neues zur symptomatischen MS-Therapie: Teil 1 – Einleitung und methodisches Vorgehen, Ataxie und Tremor. *Nervenarzt* 2017; 88: 1421–1427
2. Henze T et al. Neues zur symptomatischen MS-Therapie: Teil 2 – Gangstörung und Spastik. *Nervenarzt* 2017; 88: 1428–1434
3. Henze T et al. Neues zur symptomatischen MS-Therapie: Teil 3 – Blasenfunktionsstörungen. *Nervenarzt* 2018; 89: 184–192
4. Henze T et al. Neues zur symptomatischen MS-Therapie: Teil 4 – Störungen der Sexualfunktion und der Augenbewegungen. *Nervenarzt* 2018; 89: 193–197
5. Henze T et al. Neues zur symptomatischen MS-Therapie: Teil 5 – Fatigue. *Nervenarzt* 2018; 89: 446–452
6. Henze T et al. Neues zur symptomatischen MS-Therapie: Teil 6 – kognitive Störungen und Rehabilitation. *Nervenarzt* 2018; 89: 453–459
7. Flachenecker P et al. Multiple Sklerose in Deutschland: aktualisierte Auswertungen des MS-Registers der DMSG 2014–2018. *Fortschr Neurol Psychiatr* 2020; 88: 436–450
8. Hemmer B et al. Diagnose und Therapie der Multiplen Sklerose, Neuromyelitis-Optica-Spektrum-Erkrankungen und MOG-IgG-assoziierten Erkrankungen. S2k-Leitlinie 2021. In: Deutsche Gesellschaft für Neurologie (Hrsg.). Leitlinien für Diagnostik und Therapie in der Neurologie. Online: www.dgn.org/leitlinien; letzter Abruf am 10.05.2021
9. Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF). <https://www.awmf.org/leitlinien/awmf-regelwerk.html>
10. Flachenecker P. Fatigue bei Multipler Sklerose – pathophysiologische Aspekte und Abgrenzung zur Depression. *Ärztliche Psychotherapie* 2017; 12: 93–101
11. Sterz C et al. Employment-associated factors in multiple sclerosis – results of a cross-sectional study in Germany. *Edorium J Disabil Rehabil* 2016; 2: 24–33
12. Flachenecker P et al. „Fatigue“ bei multipler Sklerose: Entwicklung und Validierung des „Würzburger Erschöpfungs-Inventar bei Multipler Sklerose“ (WEIMuS). *Nervenarzt* 2006; 77: 165–172
13. Penner IK et al. The Fatigue Scale for Motor and Cognitive Functions (FSMC): validation of a new instrument to assess multiple sclerosis-related fatigue. *Mult Scler* 2009; 15: 1509–1517
14. Sehle A et al. Objective assessment of motor fatigue in multiple sclerosis: the Fatigue index Kliniken Schmieder (FKS). *J Neurol* 2014; 261: 1752–1762
15. Veauthier C et al. The Berlin Treatment Algorithm: recommendations for tailored innovative therapeutic strategies for multiple sclerosis-related fatigue. *EPMA J* 2016; 7: 25.eCollection 2016
16. Amatya B et al. Rehabilitation for people with multiple sclerosis: an overview of Cochrane Reviews. *Cochrane Database Syst Rev* 2019; 1: CD012732
17. Flachenecker P et al. Neuropsychological training of attention improves MS-related fatigue: Results of a randomized, placebo-controlled, double-blind pilot study. *Eur Neurol* 2017; 78: 312–317
18. Heesen C et al. Patient perception of bodily functions in multiple sclerosis: gait and visual function are the most valuable. *Mult Scler* 2008; 14: 988–991
19. Baert I et al. Responsiveness and clinical meaningful improvement, according to disability level, of five walking measures after rehabilitation in multiple sclerosis: a European multicentre study. *Neurorehab Neural Repair* 2014; 28: 621–631
20. Tholen R et al. Bewegungstherapie zur Verbesserung der Mobilität bei Patienten mit Multipler Sklerose. Konsensusfassung für die Leitlinie der DGNR in Zusammenarbeit mit Physio Deutschland – Deutscher Verband für Physiotherapie (ZVK) e. V. *Neurol Rehab* 2019; 25: 3–40

21. Flachenecker P et al. Spasticity in patients with multiple sclerosis – clinical characteristics, treatment and quality of life. *Acta Neurol Scand* 2014; 129: 154–162
22. Amatya B et al. Non-pharmacological interventions for spasticity in multiple sclerosis: an overview of Cochrane Reviews. *Cochrane Database Syst Rev* 2013; 1: CD009974
23. Haensch CA et al. Diagnostik und Therapie von neurogenen Blasenstörungen. Leitlinie der Deutschen Gesellschaft für Neurologie (DGN). www.awmf.org/uploads/tx_szleitlinien/030-121l_S1_Diagnostik-Therapie-Neurogene-Blasenstoerungen_2020-06.pdf; letzter Abruf 28.01.2021
24. DeLuca J et al. Treatment and management of cognitive dysfunction in patients with multiple sclerosis. *Nat Rev Neurol* 2020; 16: 319–332
25. Roy S et al. Impact of Pharmacotherapy on Cognitive Dysfunction in Patients with Multiple Sclerosis. *CNS Drugs* 2016; 30: 209–225

Schwerpunkt: Migräne

Titel: Aktuelle und zukünftige Therapieoptionen bei Migränen: ein Update (S. 13–30)

Autoren: J. Frank, C.J. Schankin

Literatur:

1. Gibbs SN et al. United States Patients' Perspective of Living With Migraine: Country-Specific Results From the Global "My Migraine Voice" Survey. *Headache* 2020; 60(7): 1351–1364
2. Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2017; 390(10100): 1211–1259
3. Steiner TJ et al. Migraine is first cause of disability in under 50s: will health politicians now take notice? *The journal of headache and pain* 2018; 19(1): 17
4. Lipton RB et al. The family impact of migraine: population-based studies in the USA and UK. *Cephalgia: an international journal of headache* 2003; 23(6): 429–440
5. Buse DC et al. Impact of Migraine on the Family: Perspectives of People With Migraine and Their Spouse/Domestic Partner in the CaMEO Study. *Mayo Clin Proc* 2016; S0025–6196
6. Lipton RB et al. Migraine prevalence, disease burden, and the need for preventive therapy. *Neurology* 2007; 68(5): 343–349
7. Osumili B et al. The Economic Cost of Patients With Migraine Headache Referred to Specialist Clinics. *Headache* 2018; 58(2): 287–294
8. Bonafede M et al. Direct and Indirect Healthcare Resource Utilization and Costs Among Migraine Patients in the United States. *Headache* 2018; 58(5): 700–714
9. Varkey E et al. Exercise as migraine prophylaxis: a randomized study using relaxation and topiramate as controls. *Cephalgia: an international journal of headache* 2011; 31(14): 1428–1438
10. Meyer B et al. Progressive muscle relaxation reduces migraine frequency and normalizes amplitudes of contingent negative variation (CNV). *The journal of headache and pain* 2016; 17: 37
11. Jackson JL et al. Beta-blockers for the prevention of headache in adults, a systematic review and meta-analysis. *PloS one* 2019; 14(3): e0212785
12. Diener H-C et al. Therapie der Migräneattacke und Prophylaxe der Migräne, S1-Leitlinie, 2018, in: Deutsche Gesellschaft für Neurologie (Hrsg.), Leitlinien für Diagnostik und Therapie in der Neurologie. Online: www.dgn.org/leitlinien; letzter Abruf am 12.06.2021
13. Lipton RB et al. Ineffective acute treatment of episodic migraine is associated with new-onset chronic migraine. *Neurology* 2015; 84(7): 688–695
14. Treatment of migraine attacks with sumatriptan. The Subcutaneous Sumatriptan International Study Group. *The New England journal of medicine* 1991; 325(5): 316–321

15. Goadsby PJ et al. Pathophysiology of Migraine: A disorder of sensory processing. *Physiol Rev* 2017; 553–622
16. Nilsson T et al. Contractile 5-HT_{1B} receptors in human cerebral arteries: pharmacological characterization and localization with immunocytochemistry. *British journal of pharmacology* 1999; 128(6): 1133–1140
17. Mahmoud AA & Salah S. Fast relief from migraine attacks using fast-disintegrating sublingual zolmitriptan tablets. *Drug development and industrial pharmacy* 2012; 38(6): 762–769
18. Fuseau E et al. Clinical pharmacokinetics of intranasal sumatriptan. *Clinical pharmacokinetics* 2002; 41(11): 801–811
19. Cameron C et al. Triptans in the Acute Treatment of Migraine: A Systematic Review and Network Meta-Analysis. *Headache* 2015; 55(4): 221–235
20. Dodick DW. Triptan nonresponder studies: implications for clinical practice. *Headache* 2005; 45(2): 156–162
21. Hepp Z et al. Persistence and switching patterns of oral migraine prophylactic medications among patients with chronic migraine: A retrospective claims analysis. *Cephalalgia : an international journal of headache* 2017; 37(5): 470–485
22. Goadsby PJ et al. Vasoactive peptide release in the extracerebral circulation of humans during migraine headache. *Annals of neurology* 1990; 28(2): 183–187
23. Goadsby PJ & Edvinsson L. The trigeminovascular system and migraine: studies characterizing cerebrovascular and neuropeptide changes seen in humans and cats. *Annals of neurology* 1993; 33(1): 48–56
24. Rosenfeld MG et al. Production of a novel neuropeptide encoded by the calcitonin gene via tissue-specific RNA processing. *Nature* 1983; 304(5922): 129–135
25. Tso AR & Goadsby PJ. Anti-CGRP Monoclonal Antibodies: the Next Era of Migraine Prevention? *Current treatment options in neurology* 2017; 19(8): 27
26. Juhasz G et al. Sumatriptan causes parallel decrease in plasma calcitonin gene-related peptide (CGRP) concentration and migraine headache during nitroglycerin induced migraine attack. *Cephalalgia : an international journal of headache* 2005; 25(3): 179–183
27. Cernuda-Morollón E et al. Interictal increase of CGRP levels in peripheral blood as a biomarker for chronic migraine. *Neurology* 2013; 81(14): 1191–1196
28. Brain SD & Grant AD. Vascular actions of calcitonin gene-related peptide and adrenomedullin. *Physiol Rev* 2004; 84(3): 903–934
29. Russell FA et al. Calcitonin gene-related peptide: physiology and pathophysiology. *Physiol Rev* 2014; 94(4): 1099–1142
30. Olesen J et al. Calcitonin gene-related peptide receptor antagonist BIBN 4096 BS for the acute treatment of migraine. *The New England journal of medicine* 2004; 350(11): 1104–1110
31. Ho TW et al. Efficacy and tolerability of MK-0974 (telcagepant), a new oral antagonist of calcitonin gene-related peptide receptor, compared with zolmitriptan for acute migraine: a randomised, placebo-controlled, parallel-treatment trial. *Lancet* 2008; 372(9656): 2115–2123
32. Ho TW et al. Randomized controlled trial of the CGRP receptor antagonist telcagepant for migraine prevention. *Neurology* 2014; 83(11): 958–966
33. Diener HC et al. BI 44370 TA, an oral CGRP antagonist for the treatment of acute migraine attacks: results from a phase II study. *Cephalalgia : an international journal of headache* 2011; 31(5): 573–584
34. Hewitt DJ et al. Randomized controlled trial of the CGRP receptor antagonist MK-3207 in the acute treatment of migraine. *Cephalalgia : an international journal of headache*. 2011; 31(6): 712–722
35. Rubio-Beltran E et al. Characterisation of the calcitonin gene-related peptide receptor antagonists ubrogepant and atogepant in human isolated coronary, cerebral and middle meningeal arteries. *Cephalalgia : an international journal of headache* 2020; 40(4): 357–366
36. Chaitman BR et al. A randomized, placebo-controlled study of the effects of telcagepant on exercise time in patients with stable angina. *Clinical pharmacology and therapeutics* 2012; 91(3): 459–466

37. Lipton RB et al. Effect of Ubrogepant vs Placebo on Pain and the Most Bothersome Associated Symptom in the Acute Treatment of Migraine: The ACHIEVE II Randomized Clinical Trial. *Jama* 2019; 322(19):1887–1898
38. Dodick DW et al. Ubrogepant for the Treatment of Migraine. *The New England journal of medicine* 2019; 381(23): 2230–2241
39. Goldstein DJ et al. Selective serotonin 1F (5-HT_{1F}) receptor agonist LY334370 for acute migraine: a randomised controlled trial. *Lancet* 2001; 358(9289): 1230–1234
40. Nelson DL et al. Preclinical pharmacological profile of the selective 5-HT_{1F} receptor agonist lasmiditan. *Cephalalgia : an international journal of headache* 2010; 30(10): 1159–1169
41. Lipton RB et al. Trajectory of migraine-related disability following long-term treatment with lasmiditan: results of the GLADIATOR study. *The journal of headache and pain* 2020; 21(1): 20
42. Brandes JL et al. Interim results of a prospective, randomized, open-label, Phase 3 study of the long-term safety and efficacy of lasmiditan for acute treatment of migraine (the GLADIATOR study). *Cephalalgia : an international journal of headache* 2019; 39(11): 1343–1357
43. Bigal ME et al. Therapeutic antibodies against CGRP or its receptor. *British journal of clinical pharmacology* 2015; 79(6): 886–895
44. Tringali G & Navarra P. Anti-CGRP and anti-CGRP receptor monoclonal antibodies as antimigraine agents. Potential differences in safety profile postulated on a pathophysiological basis. *Peptides* 2019; 116: 16–21
45. Tepper SJ et al. Long-term safety and efficacy of erenumab in patients with chronic migraine: Results from a 52-week, open-label extension study. *Cephalalgia : an international journal of headache* 2020; 40(6): 543–553
46. Gantenbein AR et al. Impact on monthly migraine days of discontinuing anti-CGRP antibodies after one year of treatment - a real-life cohort study. *Cephalalgia : an international journal of headache* 2021: 3331024211014616.
47. Goadsby PJ et al. Safety, tolerability, and efficacy of orally administered atogepant for the prevention of episodic migraine in adults: a double-blind, randomised phase 2b/3 trial. *The Lancet Neurology* 2020; 19(9): 727–737
48. Riederer F et al. Transcutaneous Supraorbital Nerve Stimulation (t-SNS) with the Cefaly[®] Device for Migraine Prevention: A Review of the Available Data. *Pain and therapy* 2015; 4(2): 135–147
49. Solomon S & Guglielmo KM. Treatment of headache by transcutaneous electrical stimulation. *Headache* 1985; 25(1): 12–15
50. Schoenen J et al. Migraine prevention with a supraorbital transcutaneous stimulator: a randomized controlled trial. *Neurology* 2013; 80(8): 697–704
51. Chou DE et al. Acute migraine therapy with external trigeminal neurostimulation (ACME): A randomized controlled trial. *Cephalalgia : an international journal of headache*. 2019; 39(1): 3–14
52. Piquet M et al. Supraorbital transcutaneous neurostimulation has sedative effects in healthy subjects. *BMC neurology* 2011; 11: 135
53. Magis D et al. Cerebral metabolism before and after external trigeminal nerve stimulation in episodic migraine. *Cephalalgia : an international journal of headache* 2017; 37(9): 881–891
54. Sadler RM et al. Vagal nerve stimulation aborts migraine in patient with intractable epilepsy. *Cephalalgia : an international journal of headache* 2002; 22(6): 482–484
55. Gaul C et al. Non-invasive vagus nerve stimulation for PREvention and Acute treatment of chronic cluster headache (PREVA): A randomised controlled study. *Cephalalgia : an international journal of headache* 2016; 36(6): 534–546
56. Goadsby PJ et al. Effect of noninvasive vagus nerve stimulation on acute migraine: an open-label pilot study. *Cephalalgia : an international journal of headache* 2014; 34(12): 986–993
57. Barbanti P et al. Non-invasive vagus nerve stimulation for acute treatment of high-frequency and chronic migraine: an open-label study. *The journal of headache and pain* 2015; 16: 61
58. Goadsby PJ et al. Stimulation of the greater occipital nerve increases metabolic activity in the trigeminal nucleus caudalis and cervical dorsal horn of the cat. *Pain* 1997; 73(1): 23–28

59. Saper JR et al. Occipital nerve stimulation for the treatment of intractable chronic migraine headache: ONSTIM feasibility study. *Cephalalgia : an international journal of headache* 2011; 31(3): 271–285
60. Chen YF et al. Occipital nerve stimulation for chronic migraine – a systematic review and meta-analysis. *PloS one* 2015; 10(3): e0116786
61. Schwedt TJ. Neurostimulation for primary headache disorders. *Current neurology and neuroscience reports* 2009; 9(2): 101–107

Schwerpunkt: Schlaganfall

Titel: Der Einsatz von selektiven Serotonin-Wiederaufnahmehemmern bei Schlaganfallpatienten (S. 32–37)

Autoren: D. Richter, A. Ebert, G. Junkel, C. Krogias

Literatur:

1. GBD 2016 DALYs and HALE Collaborators. Global, regional, and national disability-adjusted life-years (DALYs) for 333 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2017; 390: 1260–1344
2. Krogias C et al. Bundesweite Versorgungsrealität von Patienten mit akutem Hirninfarkt in Deutschland. *Nervenarzt* 2020; 91: 908–919
3. Schwarzbach CJ & Grau AJ. Komplikationen nach Schlaganfall. Klinische Herausforderungen in der Schlaganfallnachsorge. *Nervenarzt* 2020; 91: 920–925
4. Ringleb P et al. Akuttherapie des ischämischen Schlaganfalls, S2e-Leitlinie, 2021, in: Deutsche Gesellschaft für Neurologie (Hrsg.), Leitlinien für Diagnostik und Therapie in der Neurologie. Online: www.dgn.org/leitlinien; letzter Abruf am 07.06.2021
5. Ayerbe L et al. Natural history, predictors and outcomes of depression after stroke: systematic review and meta-analysis. *Br J Psychiatry* 2013; 202: 14–21
6. Hackett ML & Pickles K. Part I: frequency of depression after stroke: an updated systematic review and meta-analysis of observational studies. *Int J Stroke* 2014; 9: 1017–1025
7. Mead G et al. Selective serotonin reuptake inhibitors (SSRIs) for stroke recovery (Review). *Cochrane Database Syst Rev* 2013; 8: CD009286
8. Windle V & Corbett D. Fluoxetine and recovery of motor function after focal ischemia in rats. *Brain Res* 2005; 1044: 25–32
9. Li WL et al. Chronic fluoxetine treatment improves ischemia-induced spatial cognitive deficits through increasing hippocampal neurogenesis after stroke. *J Neurosci Res* 2009; 87: 112–22
10. Lim CM et al. Fluoxetine affords robust neuroprotection in the postischemic brain via its anti-inflammatory effect. *Neurosci Res* 2009; 87: 1037–45
11. Chollet F et al. Fluoxetine for motor recovery after acute ischaemic stroke (FLAME): a randomised placebo-controlled trial. *Lancet Neurol* 2011; 10, 123–130
12. Kraglund KL et al. Neuroregeneration and Vascular Protection by Citalopram in Acute Ischemic Stroke (TALOS). *Stroke* 2018; 49(11): 2568–2576

13. De Ryck A et al. Risk factors for poststroke depression: identification of inconsistencies based on a systematic review. *J Geriatr Psychiatry Neurol* 2014; 27: 147–158
14. Klingbeil J et al. Association of Lesion Location and Depressive Symptoms Poststroke. *Stroke* 2021; 52(3): 830–837
15. Kutlubaev MA & Hackett ML. Part II: predictors of depression after stroke and impact of depression on stroke outcome: an updated systematic review of observational studies. *Int J Stroke* 2014; 9: 1026–1036
16. Kohen R et al. Association of serotonin transporter gene polymorphisms with poststroke depression. *Arch Gen Psychiatry* 2008; 65: 1296–1302
17. Li W et al. Systematic hypothesis for post-stroke depression caused inflammation and neurotransmission and resultant on possible treatments. *Neuroendocrinol Lett* 2014; 35: 104–109
18. Bryer JB et al. Reduction of CSF monoamine metabolites in poststroke depression: a preliminary report. *J Neuropsychiatry Clin Neurosci* 1992; 4: 440–442
19. Kim JS et al. EMOTION Investigators. Efficacy of early administration of escitalopram on depressive and emotional symptoms and neurological dysfunction after stroke: a multicentre, double-blind, randomised, placebo-controlled study. *Lancet Psychiatry* 2017; 4: 33–41
20. EFFECTS Trial Collaboration. Safety and efficacy of fluoxetine on functional recovery after acute stroke (EFFECTS): a randomised, double-blind, placebo-controlled trial. *Lancet Neurol* 2020; 19(8): 661–669
21. FOCUS Trial Collaboration. Effects of fluoxetine on functional outcomes after acute stroke (FOCUS): a pragmatic, double-blind, randomised, controlled trial. *Lancet* 2019; 393: 265–274
22. AFFINITY Trial Collaboration. Safety and efficacy of fluoxetine on functional outcome after acute stroke (AFFINITY): a randomised, double-blind, placebo-controlled trial. *Lancet Neurol* 2020; 19(8): 651–660
23. Legg LA et al. Selective serotonin reuptake inhibitors (SSRIs) for stroke recovery. *Cochrane Database Syst Rev* 2019; 11: CD009286
24. Tsivgoulis G et al. Under-representation of women in stroke randomized controlled trials: inadvertent selection bias leading to suboptimal conclusions. *Ther Adv Neurol Disord* 2017; 10: 241–44
25. Wadhwa R et al. Serotonin reuptake inhibitors and bone health: a review of clinical studies and plausible mechanisms. *Osteoporos Sarcopenia* 2017; 3: 75–81
26. Rizzoli R et al. Antidepressant medications and osteoporosis. *Bone* 2012; 51: 606–13
27. Salter KL et al. Prevention of poststroke depression: does prophylactic pharmacotherapy work? *J Stroke Cerebrovasc Dis* 2013; 22: 1243–51

Schwerpunkt: Demenz

Titel: Praktische Diagnose und Therapie kognitiver Beeinträchtigungen im Alter: Alzheimer-Erkrankung, depressive Störungen und andere Ursachen (S. 38–43)

Autor: M. W. Riepe

Literatur:

1. Rock PL et al. Cognitive impairment in depression: a systematic review and meta-analysis. *Psychol Med* 2014; 44(10): 2029–40
2. Kingston A et al. Projections of multi-morbidity in the older population in England to 2035: Estimates from the Population Ageing and Care Simulation (PACSim) model. *Age Ageing* 2018; 47(3): 374–80
3. Koenig HG & Blazer DG. Epidemiology of geriatric affective disorders. *Clin Geriatr Med* 1992; 8(2): 235–51
4. Kim KY & Hershey LA. Diagnosis and treatment of depression in the elderly. *Int J Psychiatry Med* 1988; 18(3):211–21
5. Lanza CE et al. On the conundrum of cognitive impairment due to depressive disorder in older patients. *PLoS ONE* 2020; 15(4): e0231111
6. Lanza C et al. Cognitive profiles in persons with depressive disorder and Alzheimer's disease. *Brain Commun* 2020: fcaa206
7. Ancelin ML et al. Non-degenerative mild cognitive impairment in elderly people and use of anticholinergic drugs: longitudinal cohort study. *BMJ* 2006; 332(7539): 455–9
8. Cao YY et al. Distinct effects of antihypertensives on depression in the real-world setting: A retrospective cohort study. *J Affect Disord* 2019; 259: 386–91
9. Riepe MW et al. Drug-induced cerebral glucose metabolism resembling Alzheimer's Disease: a case study. *BMC Psychiatry* 2015; 15: 157
10. Hardy J & Selkoe DJ. The amyloid hypothesis of Alzheimer's disease: progress and problems on the road to therapeutics. *Science* 2002; 297(5580): 353–6
11. Jack CR et al. Introduction to the recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimers Dement* 2011; 7(3): 257–62
12. Albert MS et al. The diagnosis of mild cognitive impairment due to Alzheimer's disease: recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimers Dement* 2011; 7(3): 270–9
13. McKeith IG et al. Diagnosis and management of dementia with Lewy bodies: Fourth consensus report of the DLB Consortium. *Neurology* 2017; 89(1): 88–100
14. Coyle-Gilchrist ITS et al. Prevalence, characteristics, and survival of frontotemporal lobar degeneration syndromes. *Neurology* 2016; 86(18): 1736–43
15. Fein G et al. Hippocampal and cortical atrophy predict dementia in subcortical ischemic vascular disease. *Neurology* 2000; 55(11): 1626–35
16. Alonso-Lana S et al. Cognitive and Neuropsychiatric Manifestations of COVID-19 and Effects on Elderly Individuals With Dementia. *Front. Aging Neurosci* 2020; 12: 588872
17. Beinhoff U et al. Screening for Cognitive Impairment: A Triage for Outpatient Care. *Dement Geriatr Cogn Disord* 2005; 20(5): 278–85