

Online-Appendix

Das reversible zerebrale Vasokonstriktionssyndrom

Dr. med. Nicolas Beerle, Dr. med. Claudia Hader, Dr. med. Gian-Reto Kleger,
Dr. med. Georg Kägi, Dr. med. Jochen Vehoff

Der besondere Fall • doi:10.4414/smf.2019.03195
Swiss Med Forum. 2019;19(13–14):232–6.

Tabelle S1: Auswahl von Bezeichnungen des zerebralen Vasokonstriktionssyndroms (RCVS) in wissenschaftlichen Artikeln, ohne Anspruch auf Vollständigkeit.	
«Isolated benign cerebral vasculitis»	Snyder BD, McClelland RR, 1978 [1]
«Benign acute cerebral angiopathy»	Michel D et al., 1985 [2]
«Call-Fleming syndrome»	Call GK et al., 1988 [3]
«CNS pseudovasculitis»	Razavi M et al., 1999 [4]
«Enign angiopathy of the central nervous system»	Hajj-Ali RA et al., 2002 [5]
«Postpartum angiopathy»	Bogousslavsky J et al., 1989 [6]
«Migrainous vasospasm»	Serdaru M et al., 1984 [7]; Solomon S et al., 1990 [8]
«Migraine angiitis»	Jackson M et al., 1993 [9]
«Thunderclap headache with reversible vasospasm»	Dodick DW et al., 1999 [10]
«Idiopathic thunderclap headache»	Liao YC et al., 2003 [11]
«Primary thunderclap headache»	Chen SP et al., 2006 [12]
«Drug-induced cerebral vasculopathy»	Mateo I et al., 2005 [13]
«Drug-induced cerebral angiopathy»	Martin K et al., 1995 [14]

Tabelle S2: Auswahl beschriebener Ursachen des zerebralen Vasokonstriktionssyndroms (RCVS) (unter anderem nach [15]).
Schwangerschaft/Postpartalphase ± vasoaktive Substanzen ± Prä-/eklampsie ± HELLP (haemolysis, elevated liver enzymes, low platelet count)
Drogen (Cannabis, Kokain, Met-/Amphetamin, Ecstasy, Lysergsäurediethylamid [LSD], Khat, Nikotinplaster, Ethylalkohol)
Medikamente, insbesondere serotonerge oder adrenerge Substanzen
Ergotamine, Methergine
Bromocriptin, Lisurid (Dopaminagonisten)
Selektive Serotonin-Wiederaufnahmehemmer (SSRI)
Triptane
Tacrolimus, Cyclophosphamid
Erythropoietin (EPO)
Intravenöse Immunglobuline (IVIG)
Erythrozyten-Konzentrate
Vasokonstriktive Nasensprays (Xylometazolin, ...)
Adrenerge Tumore (Phäochromozytom, Karzinoid, Glomustumor)
Akute zervikale oder kraniale «Zustände» (Trauma, Chirurgie, ...)
Immunsuppressiva, Blutprodukte
Infektionen (obere/untere Atemwege, dental; 3–16%)
Emotionaler Stress (9,4–30%; in 11% der französischen Fallserie alleiniger Auslöser)
Diverses: Hyperkalzämie, Porphyrrie, Höhe, Flugzeuglandung, ...

Literatur

- 1 Snyder BD, McClelland RR. Isolated benign cerebral vasculitis. Arch Neurol. 1978;35(9):612-4.
- 2 Michel D, Vial C, Antoine JC, Laurent B, Portafaix M, Trillet M. Benign acute cerebral angiopathy. 4 cases. Rev Neurol (Paris). 1985;141(12):786-92.
- 3 Call GK, Fleming MC, Sealton S, Levine H, Kistler JP, Fisher CM. Reversible cerebral segmental vasoconstriction. Stroke. 1988;19(9):1159-70.
- 4 Razavi M, Bendixen B, Maley JE, Shoaib M, Zargarian M, Razavi B, Adams HP. CNS pseudovasculitis in a patient with pheochromocytoma. Neurology. 1999;52(5):1088-90.
- 5 Hajj-Ali RA, Furlan A, Abou-Chebel A, Calabrese LH. Benign angiopathy of the central nervous system: cohort of 16 patients with clinical course and long-term follow-up. Arthritis Rheum. 2002;47(6):662-9.
- 6 Bogousslavsky J, Despland PA, Regli F, Dubuis PY. Postpartum cerebral angiopathy: reversible vasoconstriction assessed by transcranial Doppler ultrasounds. Eur Neurol. 1989;29(2):102-5.
- 7 Serdaru M, Chiras J, Cujas M, Lhermitte F. Isolated benign cerebral vasculitis or migrainous vasospasm? J Neurol Neurosurg Psychiatry. 1984;47(1):73-6.
- 8 Solomon S, Lipton RB, Harris PY. Arterial stenosis in migraine: spasm or arteriopathy? Headache. 1990;30(2):52-61.
- 9 Jackson M, Lennox G, Jaspan T, Jefferson D. Migraine angiitis precipitated by sex headache and leading to watershed infarction. Cephalalgia. 1993;13(6):427-30.

- 10 Dodick DW, Brown RD Jr, Britton JW, Huston J 3rd. Nonaneurysmal thunderclap headache with diffuse, multifocal, segmental, and reversible vasospasm. *Cephalalgia*. 1999;19(2):118-23.
- 11 Liao YC, Fuh JL, Lirng JF, Lu SR, Wu ZA, Wang SJ. Bathing headache: a variant of idiopathic thunderclap headache. *Cephalalgia*. 2003;23(9):854-9.
- 12 Chen SP, Fuh JL, Lirng JF, Chang FC, Wang SJ. Recurrent primary thunderclap headache and benign CNS angiopathy: spectra of the same disorder? *Neurology*. 2006;67(12):2164-9.
- 13 Mateo I, Pinedo A, Gomez-Beldarrain M, Basterretxea JM, Garcia-Monco JC. Recurrent stroke associated with cannabis use. *J Neurol Neurosurg Psychiatry*. 2005;76(3):435-7.
- 14 Martin K, Rogers T, Kavanaugh A. Central nervous system angiopathy associated with cocaine abuse. *J Rheumatol*. 1995;22(4):780-2.
- 15 Calabrese LH, Dodick DW, Schwedt TJ, Singhal AB. Narrative review: reversible cerebral vasoconstriction syndromes. *Ann. Intern. Med.* 2007;146(1):34-44.