

## Publikationsliste Prof. Dr. med. René Bernays

- 1: Stienen MN, Smoll NR, Battaglia M, Schatlo B, Woernle CM, Fung C, Röthlisberger M, Daniel RT, Fathi AR, Fandino J, Hildebrandt G, Schaller K, Bijlenga P; Swiss SOS study group. Intracranial aneurysm rupture is predicted by measures of solar activity. *World Neurosurg.* 2015 Apr;83(4):588-95. doi: 10.1016/j.wneu.2014.12.021. Epub 2014 Dec 17. PubMed PMID: 25527878.
- 2: Liu W, Zhou H, Neidert MC, Schmid C, Bernays RL, Ni M, Zhou D, Jia W, Jia G. Growth hormone secreting pituitary microadenomas and empty sella - An under-recognized association? *Clin Neurol Neurosurg.* 2014 Nov;126:18-23. doi: 10.1016/j.clineuro.2014.08.012. Epub 2014 Aug 17. PubMed PMID: 25194306.
- 3: Sze L, Bernays RL, Zwimpfer C, Wiesli P, Brändle M, Schmid C. Impact of Growth Hormone on Cystatin C. *Nephron Extra.* 2013 Nov 20;3(1):118-124. eCollection 2013. PubMed PMID: 24348508; PubMed Central PMCID: PMC3861865.
- 4: Sze L, Neidert MC, Bernays RL, Zwimpfer C, Wiesli P, Haile SR, Brändle M, Schmid C. Gender dependence of serum soluble Klotho in acromegaly. *Clin Endocrinol (Oxf).* 2014 Jun;80(6):869-73. doi: 10.1111/cen.12385. Epub 2014 Jan 10. PubMed PMID: 24330426.
- 5: Magagna-Poveda A, Leske H, Schmid C, Bernays R, Rushing EJ. Expression of somatostatin receptors, angiogenesis and proliferation markers in pituitary adenomas: an immunohistochemical study with diagnostic and therapeutic implications. *Swiss Med Wkly.* 2013 Nov 12;143:w13895. doi: 10.4414/smw.2013.13895. PubMed PMID: 24222652.
- 6: Schmid C, Neidert MC, Tschopp O, Sze L, Bernays RL. Growth hormone and Klotho. *J Endocrinol.* 2013 Nov 1;219(2):R37-57. doi: 10.1530/JOE-13-0285. Print 2013 Nov. Review. PubMed PMID: 24096965.
- 7: Stienen MN, Weissaupt R, Fandino J, Fung C, Keller E, Hildebrandt G, Studerus-Germann A, Müri R, Gutbrod K, Bläsi S, Monsch AU, Brugger P, Mondadori C, Sailer M, Bijlenga P, Schaller K, Schatlo B; Swiss SOS study group. Current practice in neuropsychological outcome reporting after aneurysmal subarachnoid haemorrhage. *Acta Neurochir (Wien).* 2013 Nov;155(11):2045-51. doi: 10.1007/s00701-013-1823-9. Epub 2013 Jul 26. Review. PubMed PMID: 23887856.
- 8: Ulrich NH, Maier M, Bernays RL, Krayenbuhl N, Kollias S. Cervical myelopathy due to chronic overshunting in a pediatric patient: case report and review of the literature. *Turk Neurosurg.* 2013;23(3):410-4. doi: 10.5137/1019-5149.JTN.5604-11.0. Review. PubMed PMID: 23756987.

9: Neidert MC, Woernle CM, Leske H, Möller-Goede D, Pangalu A, Schmid C, Bernays RL. Ruptured Rathke cleft cyst mimicking pituitary apoplexy. *J Neurol Surg A Cent Eur Neurosurg.* 2013 Dec;74 Suppl 1:e229-32. doi: 10.1055/s-0033-1343985. Epub 2013 May 21. PubMed PMID: 23696292.

10: Müller N, Keil J, Obleser J, Schulz H, Grunwald T, Bernays RL, Huppertz HJ, Weisz N. You can't stop the music: reduced auditory alpha power and coupling between auditory and memory regions facilitate the illusory perception of music during noise. *Neuroimage.* 2013 Oct 1;79:383-93. doi: 10.1016/j.neuroimage.2013.05.001. Epub 2013 May 9. PubMed PMID: 23664946.

11: Kohler S, Tschopp O, Sze L, Neidert M, Bernays RL, Spanaus KS, Wiesli P, Schmid C. Monitoring for potential residual disease activity by serum insulin-like growth factor 1 and soluble Klotho in patients with acromegaly after pituitary surgery: is there an impact of the genomic deletion of exon 3 in the growth hormone receptor (d3-GHR) gene on "safe" GH cut-off values? *Gen Comp Endocrinol.* 2013 Jul 1;188:282-7. doi: 10.1016/j.ygcn.2013.04.024. Epub 2013 May 4. PubMed PMID: 23648743.

12: Woernle CM, Winkler KM, Burkhardt JK, Haile SR, Bellut D, Neidert MC, Bozinov O, Krayenbühl N, Bernays RL. Hydrocephalus in 389 patients with aneurysm-associated subarachnoid hemorrhage. *J Clin Neurosci.* 2013 Jun;20(6):824-6. doi: 10.1016/j.jocn.2012.07.015. Epub 2013 Apr 4. PubMed PMID: 23562295.

13: Serra C, Huppertz HJ, Kockro RA, Grunwald T, Bozinov O, Krayenbühl N, Bernays RL. Rapid and accurate anatomical localization of implanted subdural electrodes in a virtual reality environment. *J Neurol Surg A Cent Eur Neurosurg.* 2013 May;74(3):175-82. doi: 10.1055/s-0032-1333124. Epub 2013 Mar 19. PubMed PMID: 23512592.

14: Burkhardt JK, Neidert MC, Woernle CM, Bozinov O, Bernays RL. Intraoperative low-field MR-guided frameless stereotactic biopsy for intracerebral lesions. *Acta Neurochir (Wien).* 2013 Apr;155(4):721-6. doi: 10.1007/s00701-013-1639-7. Epub 2013 Feb 23. PubMed PMID: 23435865.

15: Winkler KM, Woernle CM, Seule M, Held U, Bernays RL, Keller E. Antibiotic-impregnated versus silver-bearing external ventricular drainage catheters: preliminary results in a randomized controlled trial. *Neurocrit Care.* 2013 Apr;18(2):161-5. doi: 10.1007/s12028-013-9816-3. PubMed PMID: 23397566.

16: Neidert MC, Sze L, Zwimpfer C, Sarnthein J, Seifert B, Frei K, Leske H, Rushing EJ, Schmid C, Bernays RL. Soluble α-klotho: a novel serum biomarker for the activity of GH-producing pituitary adenomas. *Eur J Endocrinol.* 2013 Mar 15;168(4):575-83. doi: 10.1530/EJE-12-1045. Print 2013 Apr. PubMed PMID: 23360820.

- 17: Woernle CM, Neidert MC, Wulf MA, Burkhardt JK, Grunwald T, Bernays RL. Excessively elevated C-reactive protein after surgery for temporal lobe epilepsy. *Clin Neurol Neurosurg.* 2013 Aug;115(8):1245-9. doi: 10.1016/j.clineuro.2012.11.025. Epub 2012 Dec 23. PubMed PMID: 23266263.
- 18: Bellut D, Hlavica M, Muroi C, Woernle CM, Schmid C, Bernays RL. Impact of intraoperative MRI-guided transsphenoidal surgery on endocrine function and hormone substitution therapy in patients with pituitary adenoma. *Swiss Med Wkly.* 2012 Oct 23;142:w13699. doi: 10.4414/smw.2012.13699. PubMed PMID: 23135765.
- 19: Serra C, Stauffer A, Actor B, Burkhardt JK, Ulrich NH, Bernays RL, Bozinov O. Intraoperative high frequency ultrasound in intracerebral high-grade tumors. *Ultraschall Med.* 2012 Dec;33(7):E306-12. doi: 10.1055/s-0032-1325369. Epub 2012 Nov 5. PubMed PMID: 23129521.
- 20: Schatlo B, Fung C, Fathi AR, Sailer M, Winkler K, Daniel RT, Bijlenga P, Ahlbom P, Seule M, Zumofen D, Reinert M, Woernle C, Stienen M, Levivier M, Hildebrandt G, Mariani L, Bernays R, Fandino J, Raabe A, Keller E, Schaller K. Introducing a nationwide registry: the Swiss study on aneurysmal subarachnoid haemorrhage (Swiss SOS). *Acta Neurochir (Wien).* 2012 Dec;154(12):2173-8; discussion 2178. doi: 10.1007/s00701-012-1500-4. Epub 2012 Oct 6. PubMed PMID: 23053275.
- 21: Hlavica M, Bellut D, Lemm D, Schmid C, Bernays RL. Impact of ultra-low-field intraoperative magnetic resonance imaging on extent of resection and frequency of tumor recurrence in 104 surgically treated nonfunctioning pituitary adenomas. *World Neurosurg.* 2013 Jan;79(1):99-109. doi: 10.1016/j.wneu.2012.05.032. Epub 2012 Oct 5. PubMed PMID: 23043996.
- 22: Kohler S, Tschopp O, Bernays RL, Schmid C. An unusual cure for acromegaly. *BMJ Case Rep.* 2012 Sep 7;2012. pii: bcr0220125833. doi: 10.1136/bcr.02.2012.5833. PubMed PMID: 22962372; PubMed Central PMCID: PMC3448754.
- 23: Staiger RD, Sarnthein J, Wiesli P, Schmid C, Bernays RL. Prognostic factors for impaired plasma sodium homeostasis after transsphenoidal surgery. *Br J Neurosurg.* 2013 Feb;27(1):63-8. doi: 10.3109/02688697.2012.714013. Epub 2012 Aug 21. PubMed PMID: 22905890.
- 24: Koechlin NO, Burkhardt JK, Scherer M, Krayenbühl N, Sarnthein J, Bernays RL, Bozinov O. Cerebrospinal fluid leaks after planned intradural spine surgery: a single-center analysis of 91 cases. *J Neurol Surg A Cent Eur Neurosurg.* 2013 Jul;74(4):216-21. doi: 10.1055/s-0032-1304809. Epub 2012 Aug 1. PubMed PMID: 22855319.

- 25: Neidert MC, Woernle CM, Burkhardt JK, Reimann R, Hug E, Bernays RL. Case report: Trabecular juvenile ossifying fibroma presenting as a sellar mass. *J Neurol Surg A Cent Eur Neurosurg*. 2013 Nov;74(6):405-9. doi: 10.1055/s-0032-1304219. Epub 2012 Jul 9. PubMed PMID: 22777925.
- 26: Bellut D, Holzmann D, de Alba Buenrostro G, Rushing EJ, Bernays RL. CSF containing cystic lesion of the clivus-case report and review of the literature. *Clin Neurol Neurosurg*. 2013 Jan;115(1):95-8. doi: 10.1016/j.clineuro.2012.03.040. Epub 2012 Apr 23. Review. PubMed PMID: 22534094.
- 27: Sze L, Bernays RL, Zwimpfer C, Wiesli P, Brändle M, Schmid C. Excessively high soluble Klotho in patients with acromegaly. *J Intern Med*. 2012 Jul;272(1):93-7. doi: 10.1111/j.1365-2796.2012.02542.x. Epub 2012 Apr 23. PubMed PMID: 22452701.
- 28: Fischer CM, Burkhardt JK, Sarnthein J, Bernays RL, Bozinov O. Aesthetic outcome in patients after polymethyl-methacrylate (PMMA) cranioplasty - a questionnaire-based single-centre study. *Neurol Res*. 2012 Apr;34(3):281-5. doi: 10.1179/1743132812Y.0000000007. Epub 2012 Mar 9. PubMed PMID: 22449405.
- 29: Lemm D, de Oliveira FH, Bernays RL, Kockro RA, Kollias S, Fischer I, Rushing EJ. Rare suprasellar glioblastoma: report of two cases and review of the literature. *Brain Tumor Pathol*. 2012 Oct;29(4):216-20. doi: 10.1007/s10014-012-0086-0. Epub 2012 Feb 19. PubMed PMID: 22350669.
- 30: Sarnthein J, Krayenbühl N, Actor B, Bozinov O, Bernays R. [Intraoperative neurophysiological monitoring improves outcome in neurosurgery]. *Praxis (Bern 1994)*. 2012 Jan 18;101(2):99-105. doi: 10.1024/1661-8157/a000817. Review. German. PubMed PMID: 22252591.
- 31: Ulrich NH, Burkhardt JK, Serra C, Bernays RL, Bozinov O. Resection of pediatric intracerebral tumors with the aid of intraoperative real-time 3-D ultrasound. *Childs Nerv Syst*. 2012 Jan;28(1):101-9. doi: 10.1007/s00381-011-1571-1. Epub 2011 Sep 17. PubMed PMID: 21927834.
- 32: Holzmann D, Reisch R, Krayenbühl N, Hug E, Bernays RL. The transnasal transclival approach for clivus chordoma. *Minim Invasive Neurosurg*. 2010 Oct;53(5-6):211-7. doi: 10.1055/s-0030-1267929. Epub 2011 Feb 7. PubMed PMID: 21302187.
- 33: Bozinov O, Burkhardt JK, Fischer CM, Kockro RA, Bernays RL, Bertalanffy H. Advantages and limitations of intraoperative 3D ultrasound in neurosurgery. Technical note. *Acta Neurochir Suppl*. 2011;109:191-6. doi: 10.1007/978-3-211-99651-5\_30. PubMed PMID: 20960342.

34: Möller-Goede DL, Brändle M, Landau K, Bernays RL, Schmid C. Pituitary apoplexy: re-evaluation of risk factors for bleeding into pituitary adenomas and impact on outcome. *Eur J Endocrinol.* 2011 Jan;164(1):37-43. doi: 10.1530/EJE-10-0651. Epub 2010 Oct 6. PubMed PMID: 20926593.

35: Bellut D, Hlavica M, Schmid C, Bernays RL. Intraoperative magnetic resonance imaging-assisted transsphenoidal pituitary surgery in patients with acromegaly. *Neurosurg Focus.* 2010 Oct;29(4):E9. doi: 10.3171/2010.7.FOCUS10164. PubMed PMID: 20887134.

36: Actor B, Sarnthein J, Prömmel P, Holzmann D, Bernays RL. Olfactory improvement in acromegaly after transnasal transsphenoidal surgery. *Neurosurg Focus.* 2010 Oct;29(4):E10. doi: 10.3171/2010.7.FOCUS10162. PubMed PMID: 20887120.

37: Sutter R, Shakhova O, Bhagat H, Behesti H, Sutter C, Penkar S, Santuccione A, Bernays R, Heppner FL, Schüller U, Grotzer M, Moch H, Schraml P, Marino S. Cerebellar stem cells act as medulloblastoma-initiating cells in a mouse model and a neural stem cell signature characterizes a subset of human medulloblastomas. *Oncogene.* 2010 Mar 25;29(12):1845-56. doi: 10.1038/onc.2009.472. Epub 2010 Jan 11. PubMed PMID: 20062081.

38: Baumann F, Schmid C, Bernays RL. Intraoperative magnetic resonance imaging-guided transsphenoidal surgery for giant pituitary adenomas. *Neurosurg Rev.* 2010 Jan;33(1):83-90. doi: 10.1007/s10143-009-0230-4. Epub 2009 Oct 13. PubMed PMID: 19823884.

39: Goede DL, Wiesli P, Brändle M, Bestmann L, Bernays RL, Zwimpfer C, Schmid C. Effects of thyroxine replacement on serum creatinine and cystatin C in patients with primary and central hypothyroidism. *Swiss Med Wkly.* 2009 Jun 13;139(23-24):339-44. doi: smw-12654. PubMed PMID: 19529992.

40: Schmid C, Krayenbuehl PA, Bernays RL, Zwimpfer C, Maly FE, Wiesli P. Growth hormone (GH) receptor isoform in acromegaly: lower concentrations of GH but not insulin-like growth factor-1 in patients with a genomic deletion of exon 3 in the GH receptor gene. *Clin Chem.* 2007 Aug;53(8):1484-8. Epub 2007 Jun 15. PubMed PMID: 17573420.

41: Jevdjovic T, Bernays RL, Eppler E. Insulin-like growth factor-I mRNA and peptide in the human anterior pituitary. *J Neuroendocrinol.* 2007 May;19(5):335-41. PubMed PMID: 17425608.

42: Sze L, Schmid C, Bloch KE, Bernays R, Brändle M. Effect of transsphenoidal surgery on sleep apnoea in acromegaly. *Eur J Endocrinol.* 2007 Mar;156(3):321-9. PubMed PMID: 17322492.

43: Krayenbühl N, Heppner F, Yonekawa Y, Bernays RL. Intrasellar malignant peripheral nerve sheath tumor (MPNST). *Acta Neurochir (Wien)*. 2007 Feb;149(2):201-5; discussion 205-6. Epub 2007 Jan 3. PubMed PMID: 17195046.

44: Panchaphongsaphak B, Stutzer D, Schwyter E, Bernays RL, Riener R. Haptic device for a ventricular shunt insertion simulator. *Stud Health Technol Inform*. 2006;119:428-30. PubMed PMID: 16404092.

45: Rutz HP, Hofer S, Peghini PE, Gutteck-Amsler U, Rentsch K, Meier-Abt PJ, Meier UR, Bernays RL. Avoiding glucocorticoid administration in a neurooncological case. *Cancer Biol Ther*. 2005 Nov;4(11):1186-9. Epub 2005 Nov 11. PubMed PMID: 16258258.

46: Wiesli P, Bernays R, Brändle M, Zwimpfer C, Seiler H, Zapf J, A Spinias G, Schmid C. Effect of pituitary surgery in patients with acromegaly on adiponectin serum concentrations and alanine aminotransferase activity. *Clin Chim Acta*. 2005 Feb;352(1-2):175-81. PubMed PMID: 15653112.

47: Baumann F, Bjeljac M, Kollias SS, Baumert BG, Brandner S, Rousson V, Yonekawa Y, Bernays RL. Combined thalidomide and temozolamide treatment in patients with glioblastoma multiforme. *J Neurooncol*. 2004 Mar-Apr;67(1-2):191-200. PubMed PMID: 15072467.

48: Schmid C, Wiesli P, Bernays R, Bloch K, Zapf J, Zwimpfer C, Ghirlanda C, Brändle M. Decrease in sE-selectin after pituitary surgery in patients with acromegaly. *Clin Chem*. 2004 Mar;50(3):650-2. PubMed PMID: 14981034.

49: Wieser HG, Rudolph U, Blau N, Boison D, Imhof HG, Bernays R, Yonekawa Y. Amino acid composition of brain cysts: levels of excitatory amino acids in cyst fluid fail to predict seizures. *Epilepsy Res*. 2003 Aug;55(3):191-9. PubMed PMID: 12972173.

50: Wiesli P, Brändle M, Brandner S, Kollias SS, Bernays RL. Extensive spherical amyloid deposition presenting as a pituitary tumor. *J Endocrinol Invest*. 2003 Jun;26(6):552-5. PubMed PMID: 12952370.

51: Baumert BG, Lutterbach J, Bernays R, Davis JB, Heppner FL. Fractionated stereotactic radiotherapy boost after post-operative radiotherapy in patients with high-grade gliomas. *Radiother Oncol*. 2003 May;67(2):183-90. PubMed PMID: 12812849.

52: Bernays RL. Intraoperative imaging in neurosurgery. MRI, CT, ultrasound. Introduction. *Acta Neurochir Suppl*. 2003;85:1-3. PubMed PMID: 12570131.

53: Bernays RL, Koliias SS, Khan N, Brandner S, Meier S, Yonekawa Y. Histological yield, complications, and technological considerations in 114 consecutive frameless stereotactic biopsy procedures aided by open intraoperative magnetic resonance imaging. *J Neurosurg.* 2002 Aug;97(2):354-62. PubMed PMID: 12186464.

54: Bernays RL, Koliias SS, Yonekawa Y. Dynamic changes during evacuation of a left temporal abscess in open MRI: technical case report. *Neuroradiology.* 2002 May;44(5):438-42. Epub 2002 Feb 8. PubMed PMID: 12012131.

55: Balmer B, Bernays RL, Koliias SS, Yonekawa Y. Interventional MR-guided neuroendoscopy: A new therapeutic option for children. *J Pediatr Surg.* 2002 Apr;37(4):668-72. PubMed PMID: 11912535.

56: Bernays RL, Seifert B, Koliias SS, Valavanis A, Yonekawa Y. Near-real-time guidance using intraoperative magnetic resonance imaging for radical evacuation of hypertensive hematomas in the basal ganglia. *Neurosurgery.* 2001 Aug;49(2):478. PubMed PMID: 11504131.

57: Koliias SS, Bernays RL. Interactive magnetic resonance imaging-guided management of intracranial cystic lesions by using an open magnetic resonance imaging system. *J Neurosurg.* 2001 Jul;95(1):15-23. PubMed PMID: 11453390.

58: Bernays RL, Koliias SS, Romanowski B, Valavanis A, Yonekawa Y. Near-real-time guidance using intraoperative magnetic resonance imaging for radical evacuation of hypertensive hematomas in the basal ganglia. *Neurosurgery.* 2000 Nov;47(5):1081-9; discussion 1089-90. PubMed PMID: 11063100.

59: Bernays RL, Koliias SS, Khan N, Romanowski B, Yonekawa Y. A new artifact-free device for frameless, magnetic resonance imaging-guided stereotactic procedures. *Neurosurgery.* 2000 Jan;46(1):112-6; discussion 116-7. PubMed PMID: 10626942.

60: Yonekawa Y, Imhof HG, Ogata N, Bernays R, Kaku Y, Fandino J, Taub E. Aneurysm surgery in the acute stage: results of structured treatment. *Neurol Med Chir (Tokyo).* 1998;38 Suppl:45-9. PubMed PMID: 10234977.

61: Koliias SS, Landau K, Khan N, Golay X, Bernays R, Yonekawa Y, Valavanis A. Functional evaluation using magnetic resonance imaging of the visual cortex in patients with retrochiasmatic lesions. *J Neurosurg.* 1998 Nov;89(5):780-90. PubMed PMID: 9817416.

62: Payer M, Kaku Y, Bernays R, Yonekawa Y. Intraoperative color-coded duplex sonography for localization of a distal middle cerebral artery aneurysm: technical case report. *Neurosurgery.* 1998 Apr;42(4):941-2; discussion 942-3. PubMed PMID: 9574663.

63: Kollias SS, Bernays R, Marugg RA, Romanowski B, Yonekawa Y, Valavanis A. Target definition and trajectory optimization for interactive MR-guided biopsies of brain tumors in an open configuration MRI system. *J Magn Reson Imaging*. 1998 Jan-Feb;8(1):143-59. PubMed PMID: 9500274.

64: de Tribolet N, Porchet F, Lutz TW, Gratzl O, Brotchi J, van Alphen HA, van Acker RE, Benini A, Strommer KN, Bernays RL, Goffin J, Beuls EA, Ross JS. Clinical assessment of a novel antiadhesion barrier gel: prospective, randomized, multicenter, clinical trial of ADCON-L to inhibit postoperative peridural fibrosis and related symptoms after lumbar discectomy. *Am J Orthop (Belle Mead NJ)*. 1998 Feb;27(2):111-20. PubMed PMID: 9506196.

65: Bernays RL, Laws ER Jr. Intraoperative diagnostic and interventional magnetic resonance imaging in neurosurgery. *Neurosurgery*. 1997 Oct;41(4):999. PubMed PMID: 9316074.

66: Bernays RL, Heeb L, Cuenod M, Streit P. Afferents to the rat red nucleus studied by means of D-[3H]aspartate, [3H]choline and non-selective tracers. *Neuroscience*. 1988 Aug;26(2):601-19. PubMed PMID: 3173690.