

Literatur zum Artikel

Regionalanästhesie bei ambulanten Patienten

1. Gabriel RA, Ilfeld BM (2018) Use of regional anesthesia for outpatient surgery within the United States: a prevalence study using a nationwide database. *Anesth Analg* 126: 20178–20184
2. Moore JG, Ross SM, Williams BA (2013) Regional anesthesia and ambulatory surgery. *Curr Opin Anesthesiol* 26: 652–660
3. Chiu C, Aleshi P, Esserman LJ, et al (2018) Improved analgesia and reduced post-operative nausea and vomiting after implementation of an enhanced recovery after surgery (ERAS) pathway for total mastectomy. *BMC Anesthesiol* 18: 41
4. Lin E, Choi J, Hadzic A (2013) Peripheral nerve blocks for outpatient surgery: evidence based indications. *Curr Opin Anesthesiol* 26: 467–474
5. Williams BA, DeRiso BM, Figaro CM, et al (1998) Benchmarking the perioperative process: III. Effects of regional anesthesia clinical pathway techniques on process efficiency and recovery profiles in ambulatory orthopedic surgery. *J Clin Anesth* 10: 570–578
6. Lewis SR, Price Walker KJ, McGrattan K, Smith AF (2015) Ultrasound guidance for upper and lower limb blocks. *Cochrane Database Syst Rev* 9: CD006459
7. Waurick K, Reis H, Van Aken H, et al (2014) S1-Leitlinie Rückenmarksnahe Regionalanästhesien und Thromboseprophylaxe/antithrombotische Medikation. *Anästh Intensivmed* 55: 464–492
8. Wiesmann T, Döfft J, Steinfeld T (2018) Peripheral regional anesthesia without any complications – a dream comes true? *Anaesthesiol Intensivmed Notfallmed Schmerzther* 53: 252–268
9. DGAI/BDA (2009) Überwachung nach Anästhesieverfahren. Empfehlung der Deutschen Gesellschaft für Anästhesiologie und Intensivmedizin und des Berufsverbandes Deutscher Anästhesisten. *Anästh Intensivmed* 50: S486–489
10. Krier A, Karst J (2017) Ambulante Anästhesie: Regionalanästhesie im ambulanten Bereich. *Anästhesiol Intensivmed Notfallmed Schmerzther* 52: 691–702
11. Müller T, Martin H, Merz E, Döfft J, et al (2018) DEGUM-Empfehlungen zur Hygiene in Sonografie und Endosonografie. *Ultraschall Med* 39: 284–303
12. Wissenschaftlicher Arbeitskreis Regionalanästhesie (2006) Hygieneempfehlungen für Anlage und weiterführende Versorgung von Regionalanästhesie-Verfahren. – Die „15 Gebote“ des Wissenschaftlichen Arbeitskreises Regionalanästhesie. *Anästh Intensivmed* 47: 372–379
13. Teukens A, Vannacht K, Vermeulen K, et al (2017) Measuring satisfaction and anesthesia related outcomes in a surgical day care center: a three-year single-centre observational study. *J Clin Anesth* 43: 15–23
14. BDA/DGAI/BDC (2006) Vereinbarung zur Qualitätssicherung ambulante Anästhesie des Berufsverbandes Deutscher Anästhesisten, der Deutschen Gesellschaft für Anästhesiologie und Intensivmedizin und des Berufsverbandes der Deutschen Chirurgen. *Anästh Intensivmed* 47: 50–51
15. Förster JG, Rosenberg PH (2011) Revival of old local anesthetics for spinal anesthesia in ambulatory surgery. *Curr Opin Anesthesiol* 24: 633–637
16. Wulf H, Kessler P, Steinfeld T, et al (2013) S1-Leitlinie: Empfehlungen zur Durchführung der Spinalanästhesie bei ambulanten Patienten. AWMF Register Nr. 001-022. www.awmf.org
17. Wulf H, Hampl K, Steinfeldt T (2013) Speed spinal anesthesia revisited: new drugs and their clinical effects. *Curr Opin Anesthesiol* 26: 613–620
18. Boublik J, Gupta R, Bahr S, Atchabahian A (2016) Prilocaine spinal anesthesia for ambulatory surgery: a review of the available studies. *Anaesth Crit Care Pain Med* 35: 417–421
19. Hampl K, Steinfeldt T, Wulf H (2014) Spinal anesthesia revisited: toxicity of new and old drugs and compounds. *Curr Opin Anesthesiol* 27: 549–555
20. Snoeck M (2012) Articaine: a review of its use for local and regional anesthesia. *Local Reg Anesth* 5: 23–33
21. Förster JG (2014) Short-acting spinal anesthesia in the ambulatory setting. *Curr Opin Anesthesiol* 27: 597–604
22. Hadzic A, Karaca PE, Hobeika P, et al (2005) Peripheral nerve blocks result in superior recovery profile. Compared with general anesthesia in outpatient knee arthroscopy. *Anesth Analg* 100: 976–981
23. Schipper ON, Hunt KJ, Anderson RB, et al (2017) Ankle block vs single-shot popliteal fossa block as primary anesthesia for forefoot operative procedures: Prospective randomized comparison. *Foot Ankle Int* 38: 1188–1191
24. Fredrickson MJ, Wolstencroft PJ, Chinchanwala S, Boland MR (2012) Does motor block related to long-acting brachial plexus block cause patient dissatisfaction after minor wrist and hand surgery? A randomized observer-blinded trial. *Br J Anaesth* 109: 809–815
25. White PF, Song D (1999) New criteria for fast-tracking after outpatient anesthesia: a comparison with the modified Aldrete's scoring system. *Anesth Analg* 88: 1069–1072
26. Kulenkampff D (1911) Die Anästhesierung des Plexus brachialis. *Zentralbl Chir* 38:1337–1350
27. Klaastad O, Sauter AR, Dodgson MS (2009) Brachial plexus block with or without ultrasound guidance. *Curr Opin Anesth* 22: 665–670
28. Gaertner E, Kern O, Mahoudeau G (1999) Block of the brachial plexus branches by the humeral route. a prospective study in 503 ambulatory patients. Proposal of a nerve-blocking sequence. *Acta Anaesthesiol Scand* 43: 609–613
29. Bowens C, Sripada R (2012) Regional blockade of the shoulder: Approaches and outcomes. *Anesthesiol Res Pract* 2012: 971963
30. El-Boghdady K, Chin KJ, Chan VWS (2017) Phrenic nerve palsy and regional anesthesia for shoulder surgery. *Anesthesiology* 127: 173–191
31. Falcao LF, Perez MV, de Castro I, et al (2013) Minimum effective volume of 0,5% bupivacaine with epinephrine in ultrasound-guided interscalene brachial plexus block. *Br J Anaesth* 110: 450–455
32. Bergmann L, Martini S, Kesselmeier M, et al (2016) Phrenic nerve block caused by interscalene brachial plexus block: breathing effects of different sites of injection. *BMC Anesthesiol* 16: 45
33. Yang CW, Jung SM, Kwon HU, et al (2013) Transient hemidiaphragmatic paresis after ultrasound-guided lateral sagittal infraclavicular block. *J Clin Anesth* 25: 496–468
34. Loukas M, Kinsella CR, Louis RG, et al (2006) Surgical anatomy of the accessory phrenic nerve. *Ann Thorac Surg* 82: 1870–1875
35. Tran QH, Elgueta MF, Aliste J, Finlayson RJ (2017) Diaphragm-sparing nerve blocks for shoulder surgery. *Reg Anesth Pain Med* 42: 32–38
36. Wiegel M, Moriggl B, Schwarzkopf P, et al (2017) Anterior suprascapular nerve block versus interscalene brachial plexus block for shoulder surgery in the outpatient setting. *Reg Anesth Pain Med* 42: 310–318
37. Zhang L, Tong Y, Li M, et al (2015) Sciatic-femoral nerve block versus unilateral spinal anesthesia for outpatient knee arthroscopy: a meta-analysis. *Min Anestesiol* 81: 1359–1368
38. Atkinson HD, Hamid I, Gurte CM, et al (2008) Postoperative fall after use of the 3-in-1 femoral nerve block for knee surgery: a report of four cases. *J Orthop Surg* 16: 381–384
39. LeCuyer M, Lockwood B, Locklin M (2017) Development of a fall prevention program in the ambulatory surgery setting. *J Perianesth Nursing* 32: 472–479
40. Sztaib JF, Khatibi B, Monahan AM, et al (2018) Proximal versus distal continuous adductor canal blocks: does varying perineural catheter location influence analgesia? A randomized, subject-masked controlled trial. *Anesth Analg* 127: 240–246
41. Abdallah FW, Whelan DB, Chan VW, et al (2016) Adductor canal block provides non non-inferior analgesia and superior quadriceps strength compared with femoral nerve block in anterior cruciate ligament reconstruction. *Anesthesiology* 124: 1053–1064
42. Chin KJ, Wong NWY, Macfarlane AJR, Chan VW (2011) Ultrasound-guided versus anatomic landmark-guided ankle blocks. *Reg Anesth Pain Med* 36: 611–618

43. Foote J, Freeman R, Morgan S, Jarvis A (2012) Surgeon administered regional blocks for day case forefoot surgery. *Foot Ankle Surg* 18: 141–143
44. Williams BA (2012) Forecast for perineural analgesia procedures for ambulatory surgery of the knee, foot, and ankle: applying patient-centered paradigm shifts. *Int Anesthesiol Clin* 50: 126–142
45. Williams BA, Bottegal MT, Kentor ML, et al (2007) Rebound pain scores as a function of femoral nerve block duration after anterior cruciate ligament reconstruction: retrospective analysis of a prospective, randomized clinical trial. *Reg Anesth Pain Med* 32: 186–192
46. Shah S, Tsai T, Iwata T, et al (2005) Outpatient regional anesthesia for foot and ankle surgery. *Int Anesthesiol Clin* 43: 143–151
47. Rancourt MP, Albert NT, Côté M, et al (2012) Posterior tibial nerve sensory blockade duration prolonged by adding dexmedetomidine to ropivacaine. *Anesth Analg* 115: 958–962
48. Wooden SR, Sextro PB (1990) The ankle block: anatomical review and anesthetic technique. *AANA J* 58: 105–111
49. Antonakakis JG, Scalzo DC, Jorgenson AS, et al (2010) Ultrasound does not improve the success rate of a deep peroneal nerve block at the ankle. *Reg Anesth Pain Med* 35: 217–221
50. Redborg KE, Antonakakis JG, Beach ML, et al (2009) Ultrasound improves the success rate of a tibial nerve block at the ankle. *Reg Anesth Pain Med* 34: 256–260
51. Abrahams M, Derby R, Horn JL (2016) Update on ultrasound for truncal blocks. *Reg Anesth Pain Med* 41: 275–288
52. Blanco R (2011) The PECS block: a novel technique for providing analgesia after breast surgery. *Anaesthesia* 66: 847–848
53. Blanco R, Fajardo M, Maldonado T (2012) Ultrasound description of PECS II (modified PECS I): a novel approach to breast surgery. *Rev Esp Anaesthesiol Reanim* 59: 470–475
54. Blanco R, Parras T, McDonnel JG, Prats-Galino A (2013) Serratus plane block: a novel ultrasound-guided thoracic wall nerve block. *Anaesthesia* 68: 1107–1113
55. Kiss G, Castillo M (2015) Non-intubated anesthesia in thoracic surgery. Technical issues. *Ann Transl Med* 3: 109
56. Fujiwara A, Komatsu N, Minami T (2014) Pectoral nerves (PECS) and intercostal nerve block for cardiac resynchronization therapy device implantation. *Springerplus* 3: 409
57. Miller MA, Bhatt HV, Meiner M, et al (2018) Implantation of the subcutaneous implantable-defibrillator with truncal plane blocks. *Heart Rhythm* 15: 1108–1111
58. Rafi AN (2001) Abdominal field block: a new approach via the lumbar triangle. *Anaesthesia* 56: 1024–1026
59. Tran TM, Ivanusic JJ, Hebbard P, et al (2009) Determination of spread of injectate after ultrasound-guided transversus abdominis plane block: a cadaveric study. *Br J Anaesth* 102: 123–127
60. Lee TH, Barrington MJ, Tran TM, et al (2010) Comparison of extent of sensory block following posterior and subcostal approaches to ultrasound-guided transversus abdominis plane block. *Anaesth Intensive Care* 38: 452–460
61. Hebbard PD, Barrington MJ, Vasey C (2010) Ultrasound-guided continuous oblique subcostal transversus abdominis plane blockade: description of anatomy and clinical technique. *Reg Anesth Pain Med* 35: 436–441
62. Muroshi T, Iwasaki S, Yamakage M (2016) Quadratus lumborum block. *Reg Anesth Pain Med* 41: 146–150
63. Schleich CL (1894) Schmerzlose Operationen. Springer, Berlin, S 240
64. Smith BE, Suchak M, Siggins D, Challands J (1988) Rectus sheath block for diagnostic laparoscopy. *Anaesthesia* 43: 947–948
65. Cho S, Kim YJ, Jeong K, Moon HS (2018) Ultrasound-guided bilateral rectus sheath block reduces early postoperative pain after laparoscopic gynecologic surgery: a randomized study. *J Anesth* 32: 189–197
66. Kwon W, Bang S, Soh H, et al (2018) Abdominal peripheral nerve block as the only anesthetic technique for totally extraperitoneal endoscopic inguinal hernia repair. *Medicine* 97: e1096424
67. Schmutz M, Schumacher PM, Luget C, et al (2013) Ilioinguinal and iliohypogastric nerves cannot be selectively blocked by using ultrasound guidance: a volunteer study. *Br J Anaesth* 111: 264–270
68. Bier A (1908) Über einen neuen Weg Lokalanästhesie an den Gliedmassen zu erzeugen. *Arch Klin Chir* 86: 1007–1016
69. Zink W, Graf BM (2007) Lokalanästhetikatoxizität – Relevanz empfohlener Maximaldosen? *Anästh Intensivmed* 48: 128–205
70. Guay J (2009) Adverse events associated with intravenous regional anesthesia (Bier block): a systematic review of complications. *J Clin Anesth* 21: 585–594
71. Winnie AP, Ramamurthy S, Durrani Z, Radonjic R (1975) Interscalene cervical plexus block: a single injection technique. *Anesth Analg* 54: 370–375
72. Herring AA, Stone MB, Frenkel O, et al (2012) The ultrasound-guided superficial cervical plexus block for anesthesia and analgesia in emergency care settings. *Am J Emergency Med* 30: 1263–1267
73. Tsui Y, Kobayashi T, Kakinuma H, et al (2010) An anatomical basis for blocking of the deep cervical plexus and cervical sympathetic tract using ultrasound-guided technique. *Anesth Analg* 110: 964–968
74. Rössel T, Kerstin S, Heller AR, Koch T (2013) Combination of high-resolution ultrasound-guided perivascular anesthesia of the internal carotid artery and intermediate cervical plexus block for carotid surgery. *Ultrasound Med Biol* 39: 981–986
75. Ueshima H, Otake H (2017) Cervical plexus block for perioperative analgesia during the cervical spine surgery. *J Clin Anesth* 38: 2
76. Ueshima H, Shimazaki A, Otake H (2017) Cervical plexus block for perioperative analgesia during otoplasty. *J Clin Anesth* 38: 71
77. Agung TG, Widhyana IMG, Aribawa IGNM, et al (2017) Ultrasound-guided bilateral superficial cervical plexus block is more effective than landmark technique for reducing pain from thyroidectomy. *J Pain Res* 10: 1619–1622
78. Kanthan RK (2016) The use of superficial cervical plexus block in oral and maxillofacial surgical practice as an alternative to general anesthesia in selective cases. *Ann Maxillofac Surg* 6: 4–8
79. Hillmann R, Döffert J (2016) Praxis der anästhesiologischen Sonographie, 2. Aufl. Elsevier, Urban & Fischer, München
80. Hebl JR, Horlocker TT, Kopp SL, Schroeder DR (2010) Neuraxial blockade in patients with preexisting spinal stenosis, lumbar disk disease, or prior spine surgery: efficacy and neurologic complications. *Anesth Analg* 111: 1511–1519
81. Kopp S, Jacob AK, Hebl JR (2015) Regional anesthesia in patients with preexisting neurologic disease. *Reg Anesth Pain Med* 40: 467–478
82. DGAI (2009) Empfehlung zur Lipidbehandlung bei der Intoxikation mit Lokalanästhetika. *Anästh Intensivmed* 50: 698–702