

Bibliography

1. Jia-Min Y, Xiao-Hu Y, Shu-Kun F, Chao-Qun Y, Kai C, Jia-Yi L, et al. Ultrasound guidance for brachial plexus block decreases the incidence of complete hemi-diaphragmatic paresis or vascular punctures and improves success rate of brachial plexus nerve block compared with peripheral nerve stimulator in adults. *ChinMedJ*. 2012;125(10):1811-1816.
2. Chin KJ, Alakkad H, Adhikary SD, Singh M. Infraclavicular brachial plexus block for regional anaesthesia of the lower arm. *Cochrane Database Syst Rev*. 2013;(8):CD005487. doi: 10.1002/14651858.CD005487.pub3.
3. Neal JM, Gerancher JC, Hebl JR, et al. Upper extremity regional anesthesia: essentials of our current understanding, 2008. *Reg Anesth Pain Med*. 2009;34(2):134-170. doi:10.1097/AAP.0b013e31819624eb
4. El-Boghdadly K, Chin KJ, Chan VWS. Phrenic Nerve Palsy and Regional Anesthesia for Shoulder Surgery: Anatomical, Physiologic, and Clinical Considerations. *Anesthesiology*. 2017;127(1):173-191. doi: 10.1097/ALN.0000000000001668.
5. Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ*. 2009;339:b2535. doi: 10.1136/bmj.b2535.
6. Mak PH, Irwin MG, Ooi CG, Chow BF. Incidence of diaphragmatic paralysis following supraclavicular brachial plexus block and its effect on pulmonary function. *Anaesthesia*. 2001;56(4):352-6. doi: 10.1046/j.1365-2044.2001.01708-2.x.
7. Deleuze A, Gentili ME, Marret E, Lamonerie L, Bonnet F. A comparison of a single-stimulation lateral infraclavicular plexus

block with a triple-stimulation axillary block. *Reg Anesth Pain Med.* 2003;28(2):89-94. doi: 10.1053/rapm.2003.50038.

8. A Serradell, R, Herrero J, A Villanueva J, A SantosJ, M.Moncho J, Masdeu Comparison of three different volumes of mepivacaine in axillary plexus block using multiple nerve stimulation. *Br. J. Anaesth.* 91 (4): 519±24 (2003)

9. March X, Pardina B, Torres-Bahí S, Navarro M, del Mar Garcia M, Villalonga A. A comparison of a triple-injection axillary brachial plexus block with the humeral approach. *Reg Anesth Pain Med.* 2003;28(6):504-8. doi: 10.1016/j.rapm.2003.08.024.

10. Rettig HC, Gielen MJ, Boersma E, Klein J. A comparison of the vertical infraclavicular and axillary approaches for brachial plexus anaesthesia. *Acta Anaesthesiol Scand.* 2005;49(10):1501-8. doi: 10.1111/j.1399-6576.2005.00816.x.

11. Liu FC, Liou JT, Tsai YF, Li AH, Day YY, Hui YL, Lui PW. Efficacy of ultrasound-guided axillary brachial plexus block: a comparative study with nerve stimulator-guided method. *Chang Gung Med J.* 2005;28(6):396-402.

12. Heid FM, Jage J, Guth M, Bauwe N, Brambrink AM. Efficacy of vertical infraclavicular plexus block vs. modified axillary plexus block: a prospective, randomized, observer-blinded study. *Acta Anaesthesiol Scand.* 2005;49(5):677-82. doi: 10.1111/j.1399-6576.2005.00701.x.

13. Soeding PE, Sha S, Royse CE, Marks P, Hoy G, Royse AG. A randomized trial of ultrasound-guided brachial plexus anaesthesia in upper limb surgery. *Anaesth Intensive Care.* 2005;33(6):719-25. doi: 10.1177/0310057X0503300603.

14. Pippa P, Cuomo P, Panchetti A, Scarchini M, Poggi G, D'Arienzo M. High volume and low concentration of anaesthetic solution in the perivascular interscalene sheath determines quality of block and incidence of complications. *Eur J Anaesthesiol.* 2006;23(10):855-60. doi: 10.1017/S0265021506001074..

15. Chan VW, Perlas A, McCartney CJ, Brull R, Xu D, Abbas S. Ultrasound guidance improves success rate of axillary brachial plexus block. *Can J Anaesth.* 2007;54(3):176-82. doi: 10.1007/BF03022637
16. Riazi S, Carmichael N, Awad I, Holtby RM, McCartney CJ. Effect of local anaesthetic volume (20 vs 5 ml) on the efficacy and respiratory consequences of ultrasound-guided interscalene brachial plexus block. *Br J Anaesth.* 2008;101(4):549-56. doi: 10.1093/bja/aen229.
17. Dhir S, Ganapathy S. Comparative evaluation of ultrasound-guided continuous infraclavicular brachial plexus block with stimulating catheter and traditional technique: a prospective-randomized trial. *Acta Anaesthesiol Scand.* 2008;52(8):1158-66. doi: 10.1111/j.1399-6576.2008.01736.x.
18. De José María B, Banús E, Navarro Egea M, Serrano S, Perelló M, Mabrok M. Ultrasound-guided supraclavicular vs infraclavicular brachial plexus blocks in children. *Paediatr Anaesth.* 2008;18(9):838-44. doi: 10.1111/j.1460-9592.2008.02644.x.
19. Tran DQ, Clemente A, Tran DQ, Finlayson RJ. A comparison between ultrasound-guided infraclavicular block using the "double bubble" sign and neurostimulation-guided axillary block. *Anesth Analg.* 2008;107(3):1075-8. doi: 10.1213/ane.0b013e31817ef259.
20. Koscielniak-Nielsen ZJ, Frederiksen BS, Rasmussen H, Hesselbjerg L. A comparison of ultrasound-guided supraclavicular and infraclavicular blocks for upper extremity surgery. *Acta Anaesthesiol Scand.* 2009;53(5):620-6. doi: 10.1111/j.1399-6576.2009.01909.x.
21. Renes SH, Rettig HC, Gielen MJ, Wilder-Smith OH, van Geffen GJ. Ultrasound-guided low-dose interscalene brachial plexus block reduces the incidence of hemidiaphragmatic paresis. *Reg Anesth Pain Med.* 2009;34(5):498-502. doi: 10.1097/

AAP.0b013e3181b49256.

22. Renes SH, Spoormans HH, Gielen MJ, Rettig HC, van Geffen GJ. Hemidiaphragmatic paresis can be avoided in ultrasound-guided supraclavicular brachial plexus block. *Reg Anesth Pain Med.* 2009;34(6):595-9. doi: 10.1097/aap.0b013e3181bfbfd83.

23. Tran DQ, Russo G, Muñoz L, Zaouter C, Finlayson RJ. A prospective, randomized comparison between ultrasound-guided supraclavicular, infraclavicular, and axillary brachial plexus blocks. *Reg Anesth Pain Med.* 2009;34(4):366-71. doi: 10.1097/AAP.0b013e3181ac7d18.

24. Yang CW, Kwon HU, Cho CK, Jung SM, Kang PS, Park ES, Heo YM, Shinn HK. A comparison of infraclavicular and supraclavicular approaches to the brachial plexus using neurostimulation. *Korean J Anesthesiol.* 2010;58(3):260-6. doi: 10.4097/kjae.2010.58.3.260.

25. Parrington SJ, O'Donnell D, Chan VW, Brown-Shreves D, Subramanyam R, Qu M, Brull R. Dexamethasone added to mepivacaine prolongs the duration of analgesia after supraclavicular brachial plexus blockade. *Reg Anesth Pain Med.* 2010;35(5):422-6. doi: 10.1097/AAP.0b013e3181e85eb9.

26. Giancesello L, Pavoni V, Coppini R, Buoninsegni LT, Gori G, Mori E, Paparella L, Gritti G. Comfort and satisfaction during axillary brachial plexus block in trauma patients: comparison of techniques. *J Clin Anesth.* 2010;22(1):7-12. doi: 10.1016/j.jclinane.2009.02.010.

27. Thomas LC, Graham SK, Osteen KD, Porter HS, Nossaman BD. Comparison of ultrasound and nerve stimulation techniques for interscalene brachial plexus block for shoulder surgery in a residency training environment: a randomized, controlled, observer-blinded trial. *Ochsner J.* 2011;11(3):246-52.

28. Lee JH, Cho SH, Kim SH, Chae WS, Jin HC, Lee JS, Kim YI. Ropivacaine for ultrasound-guided interscalene block: 5 mL

provides similar analgesia but less phrenic nerve paralysis than 10 mL. *Can J Anaesth.* 2011 ;58(11):1001-6. doi: 10.1007/s12630-011-9568-5.

29. Subramanyam R, Vaishnav V, Chan VW, Brown-Shreves D, Brull R. Lateral versus medial needle approach for ultrasound-guided supraclavicular block: a randomized controlled trial. *Reg Anesth Pain Med.* 2011;36(4):387-92. doi: 10.1097/AAP.0b013e318217ab1f.

30. Sinha SK, Abrams JH, Barnett JT, Muller JG, Lahiri B, Bernstein BA, Weller RS. Decreasing the local anesthetic volume from 20 to 10 mL for ultrasound-guided interscalene block at the cricoid level does not reduce the incidence of hemidiaphragmatic paresis. *Reg Anesth Pain Med.* 2011;36(1):17-20. doi: 10.1097/aap.0b013e3182030648.

31. Behr A, Freo U, Ori C, Westermann B, Alemanno F. Buprenorphine added to levobupivacaine enhances postoperative analgesia of middle interscalene brachial plexus block. *J Anesth.* 2012;26(5):746-51. doi: 10.1007/s00540-012-1416-4.

32. Bernucci F, Gonzalez AP, Finlayson RJ, Tran DQ. A prospective, randomized comparison between perivascular and perineural ultrasound-guided axillary brachial plexus block. *Reg Anesth Pain Med.* 2012;37(5):473-7. doi: 10.1097/AAP.0b013e3182576b6f.

33. Kaya M, Oğuz G, Şenel G, Kadioğulları N. Postoperative analgesia after modified radical mastectomy: the efficacy of interscalene brachial plexus block. *J Anesth.* 2013;27(6):862-7. doi: 10.1007/s00540-013-1647-z.

34. Saracoglu S, Bigat Z, Ertugrul F, Karsli B, Kayacan N. Effect of nerve localization using a pen device on the success of axillary brachial plexus block. *J Int Med Res.* 2014;42(2):337-46. doi: 10.1177/0300060513493848.

35. Arab SA, Alharbi MK, Nada EM, Alrefai DA, Mowafi HA. Ultrasound-guided supraclavicular brachial plexus block: single versus triple injection technique for upper limb arteriovenous access surgery. *Anesth Analg*. 2014;118(5):1120-5. doi: 10.1213/ANE.0000000000000155.
36. Yazer MS, Finlayson RJ, Tran DQ. A randomized comparison between infraclavicular block and targeted intracuster injection supraclavicular block. *Reg Anesth Pain Med*. 2015;40(1):11-5. doi: 10.1097/AAP.0000000000000193.
37. Bharti N, Bhardawaj N, Wig J. Comparison of ultrasound-guided supraclavicular, infraclavicular and below-C6 interscalene brachial plexus block for upper limb surgery: a randomised, observer-blinded study. *Anaesth Intensive Care*. 2015;43(4):468-72. doi: 10.1177/0310057X1504300408.
38. Bjørnholdt KT, Jensen JM, Bendtsen TF, Søballe K, Nikolajsen L. Local infiltration analgesia versus continuous interscalene brachial plexus block for shoulder replacement pain: a randomized clinical trial. *Eur J Orthop Surg Traumatol*. 2015;25(8):1245-52. doi: 10.1007/s00590-015-1678-2.
39. Singh S, Goyal R, Upadhyay KK, Sethi N, Sharma RM, Sharma A. An evaluation of brachial plexus block using a nerve stimulator versus ultrasound guidance: A randomized controlled trial. *J Anaesthesiol Clin Pharmacol*. 2015;31(3):370-374. doi:10.4103/0970-9185.161675.
40. Ryu T, Kil BT, Kim JH. Comparison Between Ultrasound-Guided Supraclavicular and Interscalene Brachial Plexus Blocks in Patients Undergoing Arthroscopic Shoulder Surgery: A Prospective, Randomized, Parallel Study. *Medicine (Baltimore)*. 2015;94(40):e1726. doi: 10.1097/MD.0000000000001726.
41. Liu GY, Chen ZQ, Jia HY, Dai ZG, Zhang XJ. The technique comparison of brachial plexus blocks by ultrasound guided with blocks by nerve stimulator guided. *Int J Clin Exp Med*. 2015

15;8(9):16699-703.

42. Kooloth RA, Patel SN, Mehta MK. A comparison of 0.5% ropivacaine and 0.5% bupivacaine in supraclavicular brachial plexus block. *NatJMedRes*. 2015;5(1):67-70.

43. Petrar SD, Seltenrich ME, Head SJ, Schwarz SK. Hemidiaphragmatic paralysis following ultrasound-guided supraclavicular versus infraclavicular brachial plexus blockade: a randomized clinical trial. *Reg Anesth Pain Med*. 2015;40(2):133-8. doi: 10.1097/AAP.0000000000000215.

44. Palhais N, Brull R, Kern C, Jacot-Guillarmod A, Charmoy A, Farron A, Albrecht E. Extrafascial injection for interscalene brachial plexus block reduces respiratory complications compared with a conventional intrafascial injection: a randomized, controlled, double-blind trial. *Br J Anaesth*. 2016;116(4):531-7. doi: 10.1093/bja/aew028.

45. Stav A, Reytman L, Stav MY, Portnoy I, Kantarovsky A, Galili O, Luboshitz S, Sevi R, Sternberg A. Comparison of the Supraclavicular, Infraclavicular and Axillary Approaches for Ultrasound-Guided Brachial Plexus Block for Surgical Anesthesia. *Rambam Maimonides Med J*. 2016;7(2):e0013. doi: 10.5041/RMMJ.10240.

46. Wiesmann T, Feldmann C, Müller HH, Nentwig L, Beermann A, El-Zayat BF, Zoremba M, Wulf H, Steinfeldt T. Phrenic palsy and analgesic quality of continuous supraclavicular vs. interscalene plexus blocks after shoulder surgery. *Acta Anaesthesiol Scand*. 2016;60(8):1142-51. doi: 10.1111/aas.12732.

47. Koh WU, Kim HJ, Park HS, Choi WJ, Yang HS, Ro YJ. A randomised controlled trial comparing continuous supraclavicular and interscalene brachial plexus blockade for open rotator cuff surgery. *Anaesthesia*. 2016;71(6):692-9. doi: 10.1111/anae.13419.

48. Ghodki PS, Singh ND. Incidence of hemidiaphragmatic

paresis after peripheral nerve stimulator versus ultrasound guided interscalene brachial plexus block. *J Anaesthesiol Clin Pharmacol.* 2016;32(2):177-81. doi: 10.4103/0970-9185.168263.

49. Stundner O, Meissnitzer M, Brummett CM, Moser S, Forstner R, Koköfer A, Danninger T, Gerner P, Kirchmair L, Fritsch G. Comparison of tissue distribution, phrenic nerve involvement, and epidural spread in standard- vs low-volume ultrasound-guided interscalene plexus block using contrast magnetic resonance imaging: a randomized, controlled trial. *Br J Anaesth.* 2016;116(3):405-12. doi: 10.1093/bja/aev550.

50. Kim BG, Han JU, Song JH, Yang C, Lee BW, Baek JS. A comparison of ultrasound-guided interscalene and supraclavicular blocks for post-operative analgesia after shoulder surgery. *Acta Anaesthesiol Scand.* 2017;61(4):427-435. doi: 10.1111/aas.12864.

51. Albrecht E, Bathory I, Fournier N, Jacot-Guillarmod A, Farron A, Brull R. Reduced hemidiaphragmatic paresis with extrafascial compared with conventional intrafascial tip placement for continuous interscalene brachial plexus block: a randomized, controlled, double-blind trial. *Br J Anaesth.* 2017;118(4):586-592. doi: 10.1093/bja/aex050.

52. Kavrut Ozturk N, Kavakli AS. Comparison of the coracoid and retroclavicular approaches for ultrasound-guided infraclavicular brachial plexus block. *J Anesth.* 2017;31(4):572-578. doi: 10.1007/s00540-017-2359-6.

53. Kang RA, Chung YH, Ko JS, Yang MK, Choi DH. Reduced Hemidiaphragmatic Paresis with a "Corner Pocket" Technique for Supraclavicular Brachial Plexus Block: Single-Center, Observer-Blinded, Randomized Controlled Trial. *Reg Anesth Pain Med.* 2018;43(7):720-724. doi: 10.1097/AAP.0000000000000795.

54. Bravo D, Aliste J, Layera S, Fernández D, Leurcharusmee P, Samerchua A, Tangjitbampenbun A, Watanitanon A,

Arnuntasupakul V, Tunprasit C, Gordon A, Finlayson RJ, Tran DQ. A multicenter, randomized comparison between 2, 5, and 8 mg of perineural dexamethasone for ultrasound-guided infraclavicular block. *Reg Anesth Pain Med.* 2019;44(1):46-51. doi: 10.1136/rapm-2018-000032.

55. Hong B, Jung C, Jo Y, Kang H, Chung W, Kim YH, et al. Sedation with dexmedetomidine prolongs the analgesic duration of brachial plexus block: a randomised controlled trial. *Anaesth Crit Care Pain Med.* 2019;38(3):231-236. doi: 10.1016/j.accpm.2018.08.006.

56. Hamed MA, Ghaber S, Reda A. Dexmedetomidine and Fentanyl as an Adjunct to Bupivacaine 0.5% in Supraclavicular Nerve Block: A Randomized Controlled Study. *Anesth Essays Res.* 2018;12(2):475-479. doi:10.4103/aer.AER_50_18.

57. Aliste J, Bravo D, Layera S, Fernández D, Jara Á, Maccioni C, et al. Randomized comparison between interscalene and costoclavicular blocks for arthroscopic shoulder surgery. *Reg Anesth Pain Med.* 2019:rapm-2018-100055. doi: 10.1136/rapm-2018-100055.

58. Auyong DB, Hanson NA, Joseph RS, Schmidt BE, Slee AE, Yuan SC. Comparison of Anterior Suprascapular, Supraclavicular, and Interscalene Nerve Block Approaches for Major Outpatient Arthroscopic Shoulder Surgery: A Randomized, Double-blind, Noninferiority Trial. *Anesthesiology.* 2018;129(1):47-57. doi: 10.1097/ALN.0000000000002208

59. Sinha C, Kumar A, Kumari P, Singh AK, Sharma S, Kumar A, Kumar A, Sahay N. Comparison of Two Doses of Dexmedetomidine for Supraclavicular Brachial Plexus Block: A Randomized Controlled Trial. *Anesth Essays Res.* 2018;12(2):470-474. doi: 10.4103/aer.AER_33_18.

60. Dharmarao PS, Holyachi R. Comparative Study of the Efficacy of Dexmedetomidine and Fentanyl as Adjuncts to

Ropivacaine in Ultrasound-Guided Supraclavicular Brachial Plexus Block. *Turk J Anaesthesiol Reanim.* 2018;46(3):208-213. doi:10.5152/TJAR.2018.98058

61. Mangal V, Mistry T, Sharma G, Kazim M, Ahuja N, Kulshrestha A. Effects of dexmedetomidine as an adjuvant to ropivacaine in ultrasound-guided supraclavicular brachial plexus Block: A prospective, randomized, double-blind study. *J Anaesthesiol Clin Pharmacol.* 2018;34(3):357-361. doi:10.4103/joacp.JOACP_182_17

62. Elyazed MMA, Mogahed MM. Comparison of Magnesium Sulfate and Dexmedetomidine as an Adjuvant to 0.5% Ropivacaine in Infraclavicular Brachial Plexus Block. *Anesth Essays Res.* 2018 J;12(1):109-115. doi: 10.4103/aer.AER_70_17.

63. Karaman T, Karaman S, Aşçı M, Tapar H, Şahin A, Dogru S, Suren M. Comparison of Ultrasound-Guided Supraclavicular and Interscalene Brachial Plexus Blocks in Postoperative Pain Management After Arthroscopic Shoulder Surgery. *Pain Pract.* 2019;19(2):196-203. doi: 10.1111/papr.12733.

64. Sivashanmugam T, Maurya I, Kumar N, Karmakar MK. Ipsilateral hemidiaphragmatic paresis after a supraclavicular and costoclavicular brachial plexus block: A randomised observer blinded study. *Eur J Anaesthesiol.* 2019;36(10):787-795. doi: 10.1097/EJA.0000000000001069.

65. Ayyanagouda B, Hosalli V, Kaur P, Ambi U, Hulkund SY. Hemi-diaphragmatic paresis following extrafascial versus conventional intrafascial approach for interscalene brachial plexus block: A double-blind randomised, controlled trial. *Indian J Anaesth.* 2019;63(5):375-381. doi: 10.4103/ija.IJA_69_19.

66. Kaur S, Dhawan J, Gupta R, Chawla S. Comparison of Magnesium Sulfate and Ketamine with Ropivacaine in Supraclavicular Brachial Plexus Block: A Randomized Controlled Trial. *Anesth Essays Res.* 2020;14(1):143-148. doi: 10.4103/aer.

AER_96_19.

67. Blanco, A.F.G., Laferrière-Langlois, P., Jessop, D. et al. Retroclavicular vs Infraclavicular block for brachial plexus anesthesia: a multi-centric randomized trial. *BMC Anesthesiol* 19, 193 (2019). doi.org/10.1186/s12871-019-0868-6.

68. Elhusein AKA, Hassan M, Ali NA. Hyaluronidase Versus Magnesium Sulphate as Adjuvants to Bupivacaine in Ultrasound Guided Supraclavicular Brachial Plexus Block in Upper Limb Surgeries. *Indian J Public Health*. 2020;11(1):959-965. <https://doi.org/10.37506/ijphrd.v11i1.596>.

69. Singh R, Singam A. Comparison between supraclavicular and interscalene brachial plexus block in patients undergoing shoulder surgery. *J Datta Meghe Inst Med Sci Univ*. 2019;14:175-8.

70. Singh R, Singam A. Comparative Evaluation of Dexmedetomidine versus Clonidine as an Adjuvant in Supraclavicular Brachial Plexus Block. *JKIMSU*. 2019; 8(3): 53-65

71. Refaat S, Rady A, El-Sonbaty A, Mahmoud A. Comparative Study between Single, Double and Intra-Cluster Injection in Ultrasound-Guided Supraclavicular Brachial Plexus Block: A Randomized Trial. *Med J Cairo Univ*.2019;87(3):1697-1702

72. Patel MA, Gadsden JC, Nedeljkovic SS, Bao X, Zeballos JL, Yu V, Ayad SS, Bendtsen TF. Brachial Plexus Block with Liposomal Bupivacaine for Shoulder Surgery Improves Analgesia and Reduces Opioid Consumption: Results from a Multicenter, Randomized, Double-Blind, Controlled Trial. *Pain Med*. 2020;21(2):387-400. doi: 10.1093/pm/pnz103.

73. Kåsine T, Romundstad L, Rosseland LA, et al. Ultrasonographic needle tip tracking for in-plane infraclavicular brachialis plexus blocks: a randomized controlled volunteer study. *Reg Anesth Pain Med*. 2020;45(8):634-639. doi:10.1136/rapm-2020-101349

74. Luo Q, Yao W, Chai Y, et al. Comparison of ultrasound-guided supraclavicular and costoclavicular brachial plexus block using a modified double-injection technique: a randomized non-inferiority trial. *Biosci Rep.* 2020;40(6):BSR20200084. doi:10.1042/BSR20200084.

75. Sachdev S, Sharma V, Malawat A, Jethava D, Moin K, Comparison of levobupivacaine alone and levobupivacaine with dexmedetomidine in supraclavicular brachial plexus block: A prospective randomized clinical trial. *Indian J Clin Anaesth* 2020;7(1):16-22

76. Singh N, Gupta S, Kathuria S. Dexmedetomidine vs dexamethasone as an adjuvant to 0.5% ropivacaine in ultrasound-guided supraclavicular brachial plexus block. *J Anaesthesiol Clin Pharmacol.* 2020;36(2):238-243. doi: 10.4103/joacp.JOACP_176_19.

77. Lotfy ME, Doha Nm, Elbakry AA, Mohamed SS. Comparative study between dexmedetomidine and fentanyl added to bupivacaine for ultrasound-guided brachial plexus block. *ResOpinion AnesthIntensive Care.* 2020;7(1):25-31

78. Youssef MY, Elsayed SF, Abd El-Mottalb EA, Tarabai GA. Efficacy of adding ketamine, dexamethasone, and epinephrine with bupivacaine in ultrasound-guided supraclavicular brachial plexus block. *Res Opin Anesth Intensive Care* 2020;7:188-96

79. Beckman HB, Frankel RM. The effect of physician behavior on the collection of data. *Ann Intern Med.* 1984 Nov;101(5):692-6. doi: 10.7326/0003-4819-101-5-692. PMID: 6486600.

80. Ting PL, Sivagnanaratnam V. Ultrasonographic study of the spread of local anaesthetic during axillary brachial plexus block. *Br J Anaesth.* 1989;63(3):326-9. doi: 10.1093/bja/63.3.326.

81. McNaught A, Shastri U, Carmichael N, Awad IT, Columb M, Cheung J, Holtby RM, McCartney CJ. Ultrasound reduces the minimum effective local anaesthetic volume compared with

peripheral nerve stimulation for interscalene block. *Br J Anaesth.* 2011;106(1):124-30. doi: 10.1093/bja/aeq306.

82. Gaertner E, Estebe JP, Zamfir A, Cuby C, Macaire P. Infraclavicular plexus block: multiple injection versus single injection. *Reg Anesth Pain Med.* 2002;27(6):590-4. doi: 10.1053/rapm.2002.36456.

83. Rodríguez J, Taboada M, Del Río S, Bárcena M, Alvarez J. A comparison of four stimulation patterns in axillary block. *Reg Anesth Pain Med.* 2005;30(4):324-8.

84. Chin KJ, Cubillos JE, Alakkad H. Single, double or multiple-injection techniques for non-ultrasound guided axillary brachial plexus block in adults undergoing surgery of the lower arm. *Cochrane Database Syst Rev.* 2016;9(9):CD003842. doi: 10.1002/14651858.CD003842.pub5.

85. Park SK, Lee SY, Kim WH, Park HS, Lim YJ, Bahk JH. Comparison of Supraclavicular and Infraclavicular Brachial Plexus Block: A Systemic Review of Randomized Controlled Trials. *Anesth Analg.* 2017;124(2):636-644. doi: 10.1213/ANE.0000000000001713.

86. Albrecht E, Mermoud J, Fournier N, Kern C, Kirkham KR. A systematic review of ultrasound-guided methods for brachial plexus blockade. *Anaesthesia.* 2016;71(2):213-27. doi: 10.1111/anae.13347.

87. Swami SS, Keniya VM, Ladi SD, Rao R. Comparison of dexmedetomidine and clonidine (α_2 agonist drugs) as an adjuvant to local anaesthesia in supraclavicular brachial plexus block: A randomised double-blind prospective study. *Indian J Anaesth.* 2012;56(3):243-9. doi: 10.4103/0019-5049.98767.

88. Yoshitomi T, Kohjitani A, Maeda S, Higuchi H, Shimada M, Miyawaki T. Dexmedetomidine enhances the local anesthetic action of lidocaine via an alpha-2A adrenoceptor. *Anesth Analg.* 2008;107(1):96-101. doi: 10.1213/ane.0b013e318176be73.

89. Saadawy I, Boker A, Elshahawy MA, Almazrooa A, Melibary S, Abdellatif AA, et al. Effect of dexmedetomidine on the characteristics of bupivacaine in a caudal block in pediatrics. *Acta Anaesthesiol Scand.* 2009;53(2):251-6. doi: 10.1111/j.1399-6576.2008.01818.x.
90. Stasiowski M, Zuber M, Marciniak R, Kolny M, Chabierska E, Jałowicki P, et al. Risk factors for the development of Horner's syndrome following interscalene brachial plexus block using ropivacaine for shoulder arthroscopy: a randomised trial. *Anaesthesiol Intensive Ther.* 2018;50(3):215-220. doi: 10.5603/AIT.a2018.0013.
91. Neal JM, Hebl JR, Gerancher JC, Hogan QH. Brachial plexus anesthesia: essentials of our current understanding. *Reg Anesth Pain Med.* 2002;27(4):402-28. doi: 10.1053/rapm.2002.34377.
92. Beck H, Schulte am Esch J, Dziadzka A, Lierse W. The dual compartment construction of the brachial plexus sheath: an anatomical study and its clinical implications. *Reg Anesth Pain Med.* 1990;15(suppl 1):47. <http://dx.doi.org/10.1136/rapm-00115550-199015011-00047>
93. Schubert AK, Dinges HC, Wulf H, Wiesmann T. Interscalene versus supraclavicular plexus block for the prevention of postoperative pain after shoulder surgery: A systematic review and meta-analysis. *Eur J Anaesthesiol.* 2019;36(6):427-435. doi: 10.1097/EJA.0000000000000988.
94. Urmeý WF, McDonald M. Hemidiaphragmatic paresis during interscalene brachial plexus block: effects on pulmonary function and chest wall mechanics. *Anesth Analg.* 1992;74(3):352-7. doi: 10.1213/00000539-199203000-00006.
95. Pakala SR, Beckman JD, Lyman S, Zayas VM. Cervical spine disease is a risk factor for persistent phrenic nerve paresis following interscalene nerve block. *Reg Anesth Pain Med.* 2013;38(3):239-42. doi: 10.1097/AAP.0b013e318289e922.

96. Bashein G, Robertson HT, Kennedy WF Jr. Persistent phrenic nerve paresis following interscalene brachial plexus block. *Anesthesiology*. 1985;63(1):102-4. doi: 10.1097/00000542-198507000-00017.

97. Kumari A, Gupta R, Bhardwaj A, Madan D. Delayed pneumothorax after supraclavicular block. *J Anaesthesiol Clin Pharmacol*. 2011;27(1):121-122.

98. Luh SP, Review: Diagnosis and treatment of primary spontaneous pneumothorax. *J Zhejiang Univ Sci B*. 2010;11(10):735-744. doi:10.1631/jzus.B1000131

99. Song SY, Roh WS. Hypotensive bradycardic events during shoulder arthroscopic surgery under interscalene brachial plexus blocks. *Korean J Anesthesiol*. 2012;62(3):209-19. doi: 10.4097/kjae.2012.62.3.209.

100. Neal JM, Gerancher JC, Hebl JR, Ilfeld BM, McCartney CJ, Franco CD, et al. Upper extremity regional anesthesia: essentials of our current understanding, 2008. *Reg Anesth Pain Med*. 2009 Mar-Apr;34(2):134-70. doi: 10.1097/AAP.0b013e31819624eb. Erratum in: *Reg Anesth Pain Med*. 2010;35(4):407.

101. El-Boghdadly K, Chin KJ, Chan VWS. Phrenic Nerve Palsy and Regional Anesthesia for Shoulder Surgery: Anatomical, Physiologic, and Clinical Considerations. *Anesthesiology*. 2017;127(1):173-191. doi: 10.1097/ALN.0000000000001668. PMID: 28514241.

102. Robaux S, Bouaziz H, Boisseau N, Raucoules-Aimé M, Laxenaire MC; S.O.S. Regional Hot Line Service. Persistent phrenic nerve paralysis following interscalene brachial plexus block. *Anesthesiology*. 2001;95(6):1519-21. doi: 10.1097/00000542-200112000-00035.

103. Deruddre S, Vidal D, Benhamou D. A case of persistent hemidiaphragmatic paralysis following interscalene

brachial plexus block. *J Clin Anesth.* 2006;18(3):238-9; author reply 239. doi: 10.1016/j.jclinane.2005.03.010.

104. Ediale KR, Myung CR, Neuman GG. Prolonged hemidiaphragmatic paralysis following interscalene brachial plexus block. *J Clin Anesth.* 2004;16(8):573-5. doi: 10.1016/j.jclinane.2004.03.005.

105. Guo CW, Ma JX, Ma XL, Lu B, Wang Y, Tian AX, Sun L, Wang Y, Dong BC, Teng YB. Supraclavicular block versus interscalene brachial plexus block for shoulder surgery: A meta-analysis of clinical control trials. *Int J Surg.* 2017;45:85-91. doi: 10.1016/j.ijsu.2017.07.098.