

Literatur zum Artikel

Robotische Leber- und Pankreaschirurgie – aktueller Stand

1. Alkatout I, Mechler U, Mettler L, et al (2021) The development of laparoscopy-A historical overview. *Front Surg* 8: 799442
2. Semm K (1983) Endoscopic appendectomy. *Endoscopy* 15: 59–64
3. Götz F, Pier A, Bacher C (1990) Die Laparoskopische Appendektomie – Alternativtherapie in allen Appendizitisstadien? *Langenbecks Arch Chir Suppl II Verh Dtsch Ges Chir*: 1351–1353
4. Mühe E (1991) Laparoskopische Cholezystektomie –Spätgergebnisse. *Langenbecks Arch Chir Suppl Kongressbd*: 416–423
5. Lacy AM, García-Valdecasas JC, Piqué JM, et al (1995) Short-term outcome analysis of a randomized study comparing laparoscopic vs open colectomy for colon cancer. *Surg Endosc* 9: 1101–1105
6. Curet MJ, Putrakul K, Pitcher DE, et al (2000) Laparoscopically assisted colon resection for colon carcinoma: perioperative results and long-term outcome. *Surg Endosc* 14: 1062–1066
7. Gagner M, Pomp A (1994) Laparoscopic pylorus-preserving pancreaticoduodenectomy. *Surg Endosc* 8: 408–410
8. Kaneko H, Takagi S, Shiba T (1996) Laparoscopic partial hepatectomy and left lateral segmentectomy: technique and results of a clinical series. *Surgery* 120: 468–475
9. Fretland ÅA, Dagenborg VJ, Bjørnelv GMW, et al (2018) Laparoscopic versus open resection for colorectal liver metastases: the OSLO-COMET randomized controlled trial. *Ann Surg* 267: 199–207
10. de Rooij J, van Hilst J, van Santvoort H, et al (2019) Minimally invasive versus open distal pancreatectomy (LEOPARD): a multicenter patient-blinded randomized controlled trial. *Ann Surg* 269: 2–9
11. Himpens J, Leman G, Cadiere GB (1998) Telesurgical laparoscopic cholecystectomy. *Surg Endosc* 12: 1091
12. Tomulescu V, Stăncilea O, Bălescu I, et al (2009) First year experience of robotic-assisted laparoscopic surgery with 153 cases in a general surgery department: indications, technique and results. *Chirurgia (Bucur)* 104: 141–150
13. Melvin WS, Needleman BJ, Krause KR, Ellison EC (2003) Robotic resection of pancreatic neuroendocrine tumor. *J Laparoendosc Adv Surg Tech A* 13: 33–36
14. Mehdorn A, Richter F, Hess K, et al (2022) The role of ICG in robot-assisted liver resections. *J Clin Med* 11: 3527
15. Bianchi PP, Salaj A, Rocco B, Formisano G (2023) First worldwide report on hugo RAST™ surgical platform in right and left colectomy. *Updates Surg* 75: 775–780
16. Monfared S, Athanasiadis DI, Umana L, et al (2022) A comparison of laparoscopic and robotic ergonomic risk. *Surg Endosc* 36: 8397–8402
17. Athanasiadis DI, Monfared S, Asadi H, et al (2021) An analysis of the ergonomic risk of surgical trainees and experienced surgeons during laparoscopic procedures. *Surgery* 169: 496–501
18. Cheng K, You J, Wu S, et al (2022) Artificial intelligence-based automated laparoscopic cholecystectomy surgical phase recognition and analysis. *Surg Endosc* 36: 3160–3168
19. Laplante S, Namazi B, Kiani P, et al (2023) Validation of an artificial intelligence platform for the guidance of safe laparoscopic cholecystectomy. *Surg Endosc* 37: 2260–2268
20. Hagen ME, Meehan JJ, Inan I, Morel P (2008) Visual clues act as a substitute for haptic feedback in robotic surgery. *Surg Endosc* 22: 1505–1508
21. Chan VO, Das JP, Gerstenmaier JF, et al (2012) Diagnostic performance of MDCT, PET/CT and gadoteric acid (primovist®)-enhanced MRI in patients with colorectal liver metastases being considered for hepatic resection: initial experience in a single centre. *Ir J Med Sci* 181: 499–509
22. Granata V, Fusco R, de Lutio di Castelguidone E, et al (2019) Diagnostic performance of gadoteric acid-enhanced liver MRI versus multidetector CT in the assessment of colorectal liver metastases compared to hepatic resection. *BMC Gastroenterol* 19: 129
23. Tanaka S, Kawaguchi Y, Kubo S, et al (2019) Validation of index-based IWATE criteria as an improved difficulty scoring system for laparoscopic liver resection. *Surgery* 165: 731–740
24. Schmidt SC, Hamann S, Langrehr JM, et al (2007) Preoperative high-dose steroid administration attenuates the surgical stress response following liver resection: results of a prospective randomized study. *J Hepatobiliary Pancreat Surg* 14: 484–492
25. Schmelzle M, Schöning W, Pratschke J (2020) Liver surgery – setup, port placement, structured surgical steps – standard operating procedures in robot-assisted liver surgery. *Zentralbl Chir* 145: 246–251
26. Ortiz Galindo SA, Haber PK, Benzing C, et al (2022) Safety of intermittent pringle maneuver during minimally invasive liver resection in patients with hepatocellular carcinoma with and without cirrhosis. *Langenbecks Arch Surg* 407: 235–244
27. Liu R, Wakabayashi G, Kim H, et al (2019) International consensus statement on robotic hepatectomy surgery in 2018. *World J Gastroenterol* 25: 1432–1444
28. Schmelzle M, Feldbrügge L, Ortiz Galindo SA, et al (2022) Robotic vs. laparoscopic liver surgery: a single-center analysis of 600 consecutive patients in 6 years. *Surg Endosc* 36: 5854–5862
29. Sucandy I, Rayman S, Lai EC, et al (2022) Robotic versus laparoscopic left and extended left hepatectomy: an international multicenter study propensity score-matched analysis. *Ann Surg Oncol* 29: 8398–8406
30. Chong CC, Fuks D, Lee K, et al (2022) Propensity score-matched analysis comparing robotic and laparoscopic right and extended right hepatectomy. *JAMA Surg* 157: 436–444
31. Feldbrügge L, Ortiz Galindo SA, Frisch O, et al (2022) Safety and feasibility of robotic liver resection after previous abdominal surgeries. *Surg Endosc* 36: 2842–2849
32. Nevermann N, Feldbrügge L, Krenzien F, et al (2023) Robotic liver surgery: technical advantages over laparoscopic technique based on parameters of surgical complexity and perioperative outcomes. *J Laparoendosc Adv Surg Tech A* 33: 56–62
33. Luberice K, Sucandy I, Modasi A, et al (2021) Applying IWATE criteria to robotic hepatectomy: is there a „robotic effect“? *HPB (Oxford)* 23: 899–906
34. Masetti M, Fallani G, Ratti F, et al (2022) Minimally invasive treatment of colorectal liver metastases: Does robotic surgery provide any technical advantages over laparoscopy? A multicenter analysis from the IGoMILS (italian group of minimally invasive liver surgery) registry. *Updates Surg* 74: 535–545
35. Sucandy I, Luberice K, Rivera-Espineira G, et al (2021) Robotic major hepatectomy: influence of age on clinical outcomes. *Am Surg* 87: 114–119
36. Steinkraus KC, Jötten L, Traub B, et al (2022) Robotic liver surgery for alveolar echinococcosis: a single-centre experience. *Pathogens* 11: 1276
37. Villegas L, Lagoo S, Schwartz T, et al (2004) Robotically assisted laparoscopic roux-en-Y hepaticojunostomy. *JSLS* 8: 239–244
38. Buchs NC, Addeo P, Bianco FM, et al (2011) Robotic palliation for unresectable pancreatic cancer and distal cholangiocarcinoma. *Int J Med Robot* 7: 60–65
39. Cuendis-Velázquez A, Trejo-Ávila M, Bada-Yllán O, et al (2019) A new era of bile duct repair: robotic-assisted versus laparoscopic hepaticojunostomy. *J Gastrointest Surg* 23: 451–459
40. Xu Y, Wang H, Ji W, et al (2016) Robotic radical resection for hilar cholangiocarcinoma: Perioperative and long-term outcomes of an initial series. *Surg Endosc* 30: 3060–3070
41. Li J, Tan X, Zhang X, et al (2020) Robotic radical surgery for hilar cholangiocarcinoma: a single-centre case series. *Int J Med Robot* 16: e2076
42. Cillo U, D'Amico FE, Furlanetto A, et al (2021) Robotic hepatectomy and biliary reconstruction for perihilar cholangiocarcinoma: a pioneer western case series. *Updates Surg* 73: 999–1006

43. Huang X, Xie J, Cai J, et al (2023) Evaluation of the short-term outcomes of robotic-assisted radical resection for perihilar cholangiocarcinoma: a propensity-scored matching analysis. *Gastroenterol Rep (Oxf)* 11: goad018
44. Kauffmann EF, Napoli N, Ginesini M, et al (2023) Tips and tricks for robotic pancreaticoduodenectomy with superior mesenteric/portal vein resection and reconstruction. *Surg Endosc* 37: 3233–3245
45. Kim NR, Han DH, Choi GH, et al (2022) Comparison of surgical outcomes and learning curve for robotic versus laparoscopic living donor hepatectomy: a retrospective cohort study. *Int J Surg* 108: 107000
46. Felsenstein M, Hillebrandt KH, Timmermann L, et al (2022) Robot-assisted pancreatic surgery-optimized operating procedures: set-up, port placement, surgical steps. *J Robot Surg* 16: 807–814
47. Wellner UF, Petrova E, Keck T (2020) Laparoskopische und robotische Pankreaschirurgie. *Allgemein- und Viszeralchirurgie up2date* 14: 539–553
48. Timmermann L, Hillebrandt KH, Felsenstein M, et al (2022) Challenges of single-stage pancreaticoduodenectomy: how to address pancreateogastrostomies with robotic-assisted surgery. *Surg Endosc* 36: 6361–6367
49. Kwon J, Lee JH, Park SY, et al (2022) A comparison of robotic versus laparoscopic distal pancreatectomy: Propensity score matching analysis. *Int J Med Robot* 18: e2347
50. Ritschl PV, Miller HK, Hillebrandt K, et al (2022) Feasibility of robotic-assisted pancreatic resection in patients with previous minor abdominal surgeries: a single-center experience of the first three years. *BMC Surg* 22: 86-y
51. Najafi N, Mintziras I, Wiese D, et al (2020) A retrospective comparison of robotic versus laparoscopic distal resection and enucleation for potentially benign pancreatic neoplasms. *Surg Today* 50: 872–880
52. Lof S, van der Heijde N, Abuawwad M, et al (2021) Robotic versus laparoscopic distal pancreatectomy: multicentre analysis. *Br J Surg* 108: 188–195
53. Magistri P, Boggi U, Esposito A, et al (2021) Robotic vs open distal pancreatectomy: a multi-institutional matched comparison analysis. *J Hepatobiliary Pancreat Sci* 28: 1098–1106
54. Lai H, Shyr Y, Shyr B, et al (2022) Minimally invasive distal pancreatectomy: laparoscopic versus robotic approach-A cohort study. *Health Sci Rep* 5: e712
55. van Hilst J, Korrel M, Lof S, et al (2021) Minimally invasive versus open distal pancreatectomy for pancreatic ductal adenocarcinoma (DIPLOMA): Study protocol for a randomized controlled trial. *Trials* 22: 608-z
56. Nickel F, Haney CM, Kowalewski KF, et al (2020) Laparoscopic versus open pancreaticoduodenectomy: a systematic review and meta-analysis of randomized controlled trials. *Ann Surg* 271: 54–66
57. Choi M, Rho SY, Kim SH, et al (2022) Total laparoscopic versus robotic-assisted laparoscopic pancreaticoduodenectomy: which one is better? *Surg Endosc* 36: 8959–8966
58. Ouyang L, Zhang J, Feng Q, et al (2022) Robotic versus laparoscopic pancreaticoduodenectomy: an up-to-date system review and meta-analysis. *Front Oncol* 12: 834382
59. Liu Q, Zhao Z, Zhang X, et al (2023) Perioperative and oncological outcomes of robotic versus open pancreaticoduodenectomy in low-risk surgical candidates: a multicenter propensity score-matched study. *Ann Surg* 277: e864–e871
60. Rosemurgy AS, Ross SB, Espeut A, et al (2022) Survival and robotic approach for pancreaticoduodenectomy: a propensity score-match study. *J Am Coll Surg* 234: 677–684
61. Napoli N, Kauffmann EF, Menonna F, et al (2018) Robotic versus open pancreaticoduodenectomy: a propensity score-matched analysis based on factors predictive of postoperative pancreatic fistula. *Surg Endosc* 32: 1234–1247
62. Klotz R, Dörr-Harim C, Bruckner T, et al (2021) Evaluation of robotic versus open partial pancreaticoduodenectomy-study protocol for a randomised controlled pilot trial (EUROPA, DRKS00020407). *Trials* 22: 4
63. Jin J, Shi Y, Chen M, et al (2021) Robotic versus open pancreaticoduodenectomy for pancreatic and periampullary tumors (PORTAL): a study protocol for a multicenter phase III non-inferiority randomized controlled trial. *Trials* 22: 954
64. Schmelze M, Malinka T, Bahra M, Pratschke J (2020) Teaching und training in der robotergestützten Chirurgie. *Zentralbl Chir* 145: 271–277
65. Fong Y, Buell JF, Collins J, et al (2020) Applying the delphi process for development of a hepatopancreaticobiliary robotic surgery training curriculum. *Surg Endosc* 34: 4233–4244
66. Bhandari M, Zeffiro T, Reddiboina M (2020) Artificial intelligence and robotic surgery: current perspective and future directions. *Curr Opin Urol* 30: 48–54
67. Bresler L, Perez M, Hubert J, et al (2020) Residency training in robotic surgery: the role of simulation. *J Visc Surg* 157: S123–S129
68. Müller PC, Kuemmerli C, Cizmic A, et al (2022) Learning curves in open, laparoscopic, and robotic pancreatic surgery: A systematic review and proposal of a standardization. *Ann Surg Open* 3: e111
69. Balzano E, Bernardi L, Tincani G, et al (2022) Implementing a robotic liver resection program does not always require prior laparoscopic experience. *Surg Endosc* 36: 3317–3322
70. Hoehn RS, Nassour I, Adam MA, et al (2021) National trends in robotic pancreatic surgery. *J Gastrointest Surg* 25: 983–990
71. Benzing C, Timmermann L, Winklmann T, et al (2022) Robotic versus open pancreatic surgery: a propensity score-matched cost-effectiveness analysis. *Langenbecks Arch Surg* 407: 1923–1933