

Curriculum Vitae

Prof. Dr. Peter Biro MD DESAIC
25 March 2025

Personal data

Birthday	31 December 1956
Born in	Oradea (Romania)
Emigration to Germany	April 1970
Move to Switzerland	October 1987
Retirement	January 2022

LinkedIn Profile

<https://www.linkedin.com/in/peter-biro-0a805222/>

Professional development

since 1.1.2022	Medical Advisership for MedTech companies such as GuideIn Medical (Nazaret, Israel), RGB Medical Devices (Madrid, Spain), Innoventiv (Baar, Switzerland).
7.3.2021	Co-Founding of aiEndoscopic AG, Zurich, Switzerland
1.1.2022	Retirement from clinical activity
Nov. 2020-31.12.2021	Pre-anesthesia Ambulatory Unit at, University Hospital Zurich
2016-2020	Head of Division for Anesthesia in Urology, University Hospital Zurich
since 2014	Assistant Professor of Anesthesiology, University Hospital Zurich
2002-2013	Head of Division for Gynecological and Obstetric Anesthesia, University Hospital Zurich
since 9.2.2001	Docent for anesthesiology at the Medical Faculty, University of Zurich
9.2.2001	Habilitation for Anesthesiology at the Faculty of Medicine, Zürich University
since 1.1.1999	Coordinator of anesthesia services for Gynaecology and Obstetrics at the University Hospital Zurich
10.12.1998	Swiss Diploma for Anesthesiology FMH
since 1.7.1998	Senior Anesthetist at the Department of Anesthesiology, University Hospital Zurich (Prof. Dr. med. T. Pasch)
7.7.1998	German Diploma for Anesthesiological Intensive Care, Medical Chamber Baden-Württemberg, Germany
9.5.1998	Diploma of the European Academy of Anesthesiology
1.1.1998-30.6.1998	Resident at the Department of Internal Medicine, Oncology, Thoraxklinik Heidelberg, Germany (Prof. Dr. med. P. Drings)
1.7.1997-31.12.1997	Resident at the Department of Neuroradiology, University Hospital Zurich (Prof. Dr. med. A. Valavanis)
23.12.1996	Swiss Medical State Exam and Diploma at the Faculty of Medicine, Zürich University
1.7.1990-30.6.1997	Resident at the Department of Anesthesiology, University Hospital Zurich (Prof. Dr. med. T. Pasch)
1.1.1990-30.6.1990	Resident at the Department of Anesthesiology, Children's Hospital Zurich (Dr. med. P. Dangel)
15.10.1987-31.12.1989	Resident at the Department of Anesthesiology, University Hospital Zurich, Switzerland (Prof. Dr. med. T. Pasch)
30.9.1987	German Diploma for Anesthesiology, Medical Chamber Hessen, Germany
1.6.1983-30.9.1987	Resident at the Department of Anesthesiology, St. Markus Hospital, Frankfurt am Main (Prof. Dr. med. H. Kronschwitz)

Milestones in high school study

18.7.1983	Medical Doctor's Degree at the Faculty of Medicine of the Johann-Wolfgang-von-Goethe University, Frankfurt am Main, for "Investigations for the evidence of carcinogens in an in vivo-in vitro test system with rat peritoneal cells" (Prof. Dr. P. Chandra)
31.5.1983	State Exam and Diploma at the Johann-Wolfgang-von-Goethe University, Frankfurt am Main
1977-1983	Study of medicine at the Johann-Wolfgang-von-Goethe University, Frankfurt am Main (Germany)
1976-1977	Study of medicine for the duration of one semester at the Babes-Bolyai University, Cluj-Napoca (Romania)

Professional experience/scientific career

In I look back on 35 years of clinical development and experience in all fields of anesthesiology. During this period I have focused in increasing fashion on problems connected to airway management. This is a main skill in anesthesiology that deals with the potential risks of hypoxemia, brain damage and anesthesia related mortality. From 1990 on, my main focus was setting standards in High Frequency Jet Ventilation and in the development of equipment for the safe and efficient application of this technology. Besides I am involved in developing the standards of acute post-anesthesia care, obstetric anesthesia and pharmacological issues. Other important topics covered by me in clinical as well as in scientific context are the performance and surveillance of deep neuro-muscular blockade and the assessment of surgical invasiveness as an important factor of post-operative outcome. More recently I was involved an anesthesia for intrauterine (fetal) surgery and I am inventor and co-developer of an automated robotic intubation device, which is in the phase of technical assembly for a first prototype. My academic habilitation in 2001 focused on clinical aspects of High Frequency Jet Ventilation. Until now, I have published over 64 original articles, 30 review articles, 21 book chapters and 7 monographs (2023). The number of invited lectures in various national and international institutions is above 300. In the autumn of 2023, the number of citations from my scientific articles is 1'979 and my h-Index stands at 25.

Teaching activities

Since the mid-nineties, I have organized the postgraduate education courses of the Institute of Anesthesiology in close co-operation and co-ordination with two successive chairmen of the department Th. Pasch and D. Spahn). I also have developed the video conference platform for the postgraduate education courses that since then are simultaneously transmitted into a dozen of peripheral hospitals. I organized the curricular teaching for the students of the Medical Faculty of Zurich University and to a large extent I performed the teaching by myself. This comprises lectures and practical courses for students in the academic years 3, 4, 5 and 6. Those students of the academic year 5, who are employed in the Institute of Anesthesiology, are also subjected to a basic training course in airway management. I also was responsible for the eLearning platform for anesthesiology on the designated platform of the Medical Faculty. In addition, I have organized the European Society of Anesthesiology examinations in Zurich over two decades and have examined myself for an even longer duration. I have maintained this activity even after my retirement from clinical work.

Awards

Teaching Recognition Award of the European Academy of Anaesthesiology 2001

Memberships in societies, editorial boards

Education Advisory Board of the Society for Head and Neck Anesthesia since 2012
ESA Subcommittee on Airway Management 2006-2009
ESA Examination Committee since 2005
Treasurer of the European Airway Management Society (EAMS) 2003-2008
President of the European Society for Jet Ventilation (ESJV) 2000-2004
Editorial board of „Anaesthetist“ since 1999
European Society for Computing and Technology in Anaesthesia and Intensive Care since 1997
Association for Low Flow Anaesthesia since 1996

European Academy of Anaesthesiology since 1998, Academician since 2000
Editorial board of „Acta Anaesthesiologica Helvetica“ 1995-1997
Deutsche Gesellschaft für Anästhesiologie und Intensivmedizin since 1985

Publications (excerpt since 2001)

Original articles

1. Biro P, Hegi TR, Weder W, Spahn DR. Laryngeal mask airway and high-frequency jet ventilation for the resection of a high grade tracheal stenosis. *Journal of Clinical Anesthesia* 2001; 13:141-143
2. Külling D, Fantin AC, Biro P, Bauerfeind P, Fried M. Safer colonoscopy with patient-controlled analgesia and sedation with propofol and alfentanil. *Gastrointestinal Endoscopy* 2001; 54: 1-7
3. Biro P, Weiss M. Comparison of two video-assisted techniques for the difficult intubation. *Acta Anaesthesiologica Scandinavica* 2001; 45: 761-765
4. Weber B, Burger C, Biro P, Buck A. A femoral arterio-venous shunt facilitates arterial whole blood sampling in animals. *European Journal of Nuclear Medicine and Molecular Imaging* 2002; 29: 319-323
5. Sokolovic E, Biro P, Wyss P, Werthemann C, Haller U, Spahn D, Szucs T. Impact of the reduction of anaesthesia turnover time on operating room efficiency. *European Journal of Anaesthesiology* 2002; 19: 560-563
6. Frochaux D, Rajan GP, Biro P. Verhalten des neuen LaserJet®-Katheters bei CO₂-Laser-Anwendung unter simulierten klinischen Bedingungen. *Anaesthesist* 2004; 53: 820-825
7. Biro P, Seifert B, Pasch T. Complaints of sore throat after tracheal intubation: a prospective evaluation. *European Journal of Anaesthesiology* 2005; 22: 307-311
8. Juri O, Frochaux D, Rajan GP, Biro P. Entflammungs- und Brandverhalten von biologischem Gewebe bei in-vitro-Bestrahlung mit dem CO₂-Laser. *Anaesthesist* 2006; 55: 541-546
9. Biro P, Bättig U, Henderson J, Seifert B. First clinical experience of tracheal intubation with the SensaScope®, a novel steerable semirigid video stylet. *British Journal of Anaesthesia* 2006; 97:255-261
10. Voney G, Roos M, Frielingsdorf B, Shafighi M, Biro P, Wyss P. Interrelation of perioperative morbidity and ASA class assignment in patients undergoing gynaecological surgery. *European Journal of Obstetrics, Gynaecology and Reproductive Biology* 2007; 132: 220-225
11. Biro P, Spahn DR, Pfammatter T. High frequency jet ventilation for minimizing breathing-related liver motion during percutaneous radiofrequency ablation of hepatic tumors. *British Journal of Anaesthesia* 2009; 102, 650-653
12. Biro P, Spahn DR, The difficult intubation drill at the University Hospital Zurich. *Jurnalul Roman de Anestezie si Terapie Intensiva* 2009; 16; 147-153
13. Müller T, Ludwig A, Biro P. Two distinct application habits for propofol. An observational study. *European Journal of Anaesthesiology* 2010; 27: 265–269
14. Biro P. The SensaScope®: a new hybrid video intubation stylet for regular and difficult intubation. *Visible Human Journal of Endoscopy* 2010; 9: 3 [electronic journal: <http://journals.sfu.ca/vhjoe/index.php/vhjoe/article/view/12/33>]. Aurora, CO

15. Biro P. Clinical experience with the SensaScope®, a hybrid video intubation stylet for the difficult intubation. *Anestezjologia i Ratownictwo (Anaesthesiology and Rescue Medicine)* 2010; 4: 281-287
16. Ludwig AA, Baulig W, Biro P. A simulated severe difficult airway does not alter the intubation performance with the SensaScope®: a manikin study. *European Journal of Anaesthesiology* 2011; 28: 449–453
17. Abderhalden S, Biro P, Hechelhammer L, Pfiffner R, Pfammatter T. Computer tomography-guided navigation of percutaneous hepatic and renal radio-frequency ablation (RFA) under high-frequency jet ventilation (HFJV): a feasibility study. *Journal of Vascular and Interventional Radiology* 2011; 22: 1275-1278
18. Biro P. A simple formula for quantification and comparison of systemic drug dosage patterns in the context of application times. *Anestezjologia i Ratownictwo* 2013; 7: 182-184
19. Meuli M, Moehrlen U, Flake A, Ochsenbein N, Huesler M, Biro P, Scheer I, Tharakan S, Dürig P, Zimmermann R. Key features of our first open in utero repair of myelomeningocele. *European Journal of Pediatric Surgery* 2013;23:494-498
20. Biro P, Grande B, Kind SL, Spahn DR, Theusinger OM. Concluding results from the first phase of the Zurich Unexpected Difficult Airway course based on exercise of technical skills. *Anaesthesia* 2014; 69: 452–457
21. Biro P, Grande B, Kind SL, Spahn DR, Theusinger OM. Concluding results from the first phase of the Zurich Unexpected Difficult Airway course based on exercise of technical skills. *Anaesthesia* 2014; 69: 452–457 doi: 10.1111/anae.12606.
22. Biro P. Calculation of volatile anaesthetics consumption from agent concentration and fresh gas flow. *Acta Anesthesiologica Scandinavica* 2014; 58: 968-972 doi: 10.1111/aas.12374
23. Biro P, Ruetzler K. The Reflective Intubation maneuver increases intubation success rate in moderately difficult direct laryngoscopy. *European Journal of Anaesthesiology* 2015;32:406–410
doi: 10.1097/EJA.000000000000159
24. Alkandari Z, Kind SL, Spahn DR, Biro P. Early post-anesthesia recovery parameters as a key feature for quality control; presentation of baseline results. *J Rom Anest Terap Int (Romanian Journal of Anaesthesia and Intensive Care)*, in Print
25. Biro P, Kneschke O, Theusinger O.M. Reliability of the volatile anaesthetic consumption display in the Draeger Primus™ anaesthesia ventilator. *J Clin Monit Comput* 2015; 29: 601-604
DOI 10.1007/s10877-014-9639-6
26. Grande B, Weiss M, Biro P, Steiger P, Grote G, Spahn DR, Kolbe M. Is talking important? Technical versus combined technical/non-technical airway training in anaesthesia and intensive care medicine. *Anästhesiologie & Intensivmedizin* 2015;56:1-8
27. Biro P, Kneschke TO, Theusinger OM. Accuracy of calculated volatile agent consumption from fresh gas content. *Acta Anesthesiologica Scandinavica* 2015; 59: 619–62
doi: 10.1111/aas.12487
28. Biro P, Kneschke O, Theusinger O.M. Reliability of the volatile anaesthetic consumption display in the Draeger Primus™ anaesthesia ventilator. *J Clin Monit Comput* 2015; 29: 601-604. DOI 10.1007/s10877-014-9639-6

29. Biro P, Ruetzler K. The Reflective Intubation maneuver increases intubation success rate in moderately difficult direct laryngoscopy. *European Journal of Anaesthesiology* 2015;32:406–410. doi: 10.1097/EJA.0000000000000159
30. Alkandari Z, Kind SL, Spahn DR, Biro P. Early post-anaesthesia recovery parameters – a prospective observational study. *J Rom Anest Terap Int (Romanian Journal of Anaesthesia and Intensive Care)* 2015; 22: 103-110
31. Biro P, Sermeus L, Jankovic R, Savić N, Onuțu AH, Ionescu D, Godoroja D, Gurman G. Basic features and clinical applicability of the “Preliminary Universal Surgical Invasiveness Score” (pUSIS); a multi-center pilot study. *Turk J Anaesthesiol Reanim* 2017; 45: 9-15. DOI: 10.5152/TJAR.2017.77785
32. Mitre C, Mitre I, Gyöngyösi Z, Fülesdi B, Zdrehus C, Breazu C, Biro P. Clinical experiences with the FRONT formula for pre-operative airway assessment and documentation: a multi-centre study. *Turk J Anaesthesiol Reanim* 2017; 45: 225-30 DOI: 10.5152/TJAR.2017.97992
33. Ochsenbein-Kölble N, Krähenmann F, Hüsler M, Meuli M, Möhrle U, Mazzone RL, Biro P, Zimmermann R. Tocolysis for in utero surgery: atosiban performs distinctly better than magnesium sulfate. *Fetal Diagnosis and Therapy* 2017 Aug 17. doi: 10.1159/000478261
34. Biro P, Fried E, Kristensen MS. A new retrograde transillumination technique for videolaryngoscopic tracheal intubation. *Anaesthesia* 2018, 73, 474–479. doi: 10.1111/anae.14217. PMID: 29345325
35. Kristensen MS, Fried E, Biro P. Infrared Red Intubation System (IRRIS) guided flexible videoscope assisted difficult airway management. *Acta Anaesthesiol Scand* 2018;62:19-25. doi: 10.1111/aas.13016
36. Goltz K, Dambach M, Schläpfer M, Biro P. Non-Feasibility to Estimate the Need for Reversal of Neuromuscular Relaxation from the Applied Rocuronium Dosing Pattern: A Retrospective Analysis of Anaesthesia Records. *Turkish Journal of Anaesthesiology and Reanimation* 2018; 46: 57-61 DOI: 10.5152/TJAR.2018.98705
37. Baulig W, Weber M, Beck Schimmer B, Theusinger OM, Biro P. Short-term general anaesthesia for retro-bulbar block in ophthalmic surgery generates no significant hypercapnia. *Journal of Clinical Monitoring and Computing* 2018; 32: 351-358. DOI 10.1007/s10877-017-0011-5
38. Valko PO, Roschitzki B, Faigle W, Grossmann J, Panse C, Biro P, Dambach M, Spahn DR, Weller M, Martin R, Baumann CR. In search of cerebrospinal fluid biomarkers of fatigue in multiple sclerosis: a proteomics study. *Journal of Sleep Research* 2018; doi.org/10.1111/jsr.12721
39. Ochsenbein-Kölble N, Krähenmann F, Hüsler M, Meuli M, Mazzone RL, Möhrle U, Biro P, Zimmermann R. Tocolysis for in utero Surgery: Atosiban Performs Distinctly Better than Magnesium Sulfate. *Fetal Diagnostics and Therapy* 2018; 44: 59-64. doi: 10.1159/000478261
40. Müntz L, Schläpfer M, Biro P. Anesthetic drug choices by senior anesthetists: an observational analysis of medication habits in a tertiary hospital. *Turk J Anaesthesiol Reanim* 2018 ;46: 348-53 DOI: 10.5152/TJAR.2018.00236
41. Biro P, Schläpfer M. Tracheal intubation with channeled vs. non-channeled videolaryngoscope blades. *Romanian Journal of Anaesthesia and Intensive Care* 2018; 25: 97-101. DOI: 10.21454/rjaic.7518.252.sch

42. Godoroja D, Copcescu C, Agache M, Biro P. Impact of retrograde transillumination while securing the airway in obese patients undergoing bariatric surgery. *Journal of Clinical Monitoring and Computing* 2019 (in Press)
43. Möhrle U, Ochsenbein-Kölble N, Mazzone L, Kraehenmann F, Hüsler M, Casanova B, Biro P, Wille D, Latal B, Scheer I, Bernet V, Moehrlen T, Held L, Flake AW, Zimmermann R, Meuli M. Benchmarking against the MOMS Trial: Zurich Results of Open Fetal Surgery for Spina Bifida. *Fetal Diagn Ther* 2019; 45: doi: 10.1159/000500049
44. Tra S, Ochsenbein-Kölble O, Stein P, Meuli M, Moehrlen U, Mazzone L, Kraehenmann F, Zimmermann R, Biro P. Association of uterine activity and maternal volatile anesthetic exposure during open fetal surgery for spina bifida: a retrospective analysis. *Int J Obstet Anesth* 2021;46:102974. doi: 10.1016/j.ijoa.2021.102974. Epub 2021 Mar 10
45. Godoroja D, Copcescu C, Agache M, Biro P. Impact of retrograde transillumination while securing the airway in obese patients undergoing bariatric surgery. *Journal of Clinical Monitoring and Computing* 2020; 34:1069–1077
46. Sunnen M, Schlaepfer M, Biro P. Automated quantitative relaxometry for deep neuromuscular blockade in robot-assisted prostatectomy. *Romanian Journal of Anaesthesia and Intensive Care* 2020; 27, 29-34, <https://doi.org/10.2478/rjaic-2020-0004>
47. Biro P, Hofmann Ph, Gage D, Boehler Q, Chautems C, Braun J, Spahn DR, Nelson B. Automated tracheal intubation in an airway manikin using a robotic endoscope. A proof of concept study. *Anaesthesia* 2020, 75, 881–886. doi:10.1111/anae.14945
48. Kristensen MS, Hesselheldt R, Henning K, Brinkenfeldt HK, Biro P. Trans-cricothyroid infrared flashing light as guidance to awake intubation with a flexible bronchoscope – a randomised cross-over study. *Acta Anaesthesiol Scand* 2023 Jan 23, doi: 10.1111/aas.14204

Review articles

1. Alon E, Biro P. Schmerzlinderung während der Schwangerschaft. *Der Mediziner* 2004; 8: 20-22
2. Külling D, Bauerfeind P, Fried M, Biro P. Patient-controlled analgesia and sedation in gastrointestinal endoscopy. *Gastrointestinal Endoscopy Clinics of North America* 2004; 14: 353-368
3. Külling D, Biro P, Fried M, Bauerfeind P. A synopsis of patient-controlled analgesia and sedation (PCAS) for endoscopic procedures. *Techniques in Gastro Intestinal Endoscopy* 2004; 6: 65-68
4. Alon E, Biro P, Niv D. Gestational low back pain and headache during pregnancy: causes and treatment. *International Monitor of Regional Anaesthesia and Pain Medicine* 2004; 16: 3-5
5. Stocker R, Biro P. Airway management and artificial ventilation in intensive care. *Current Opinion in Anesthesiology* 2005; 18: 35-45
6. Alon E, Jaquenod M, Schaeppi B, Aeschbach A, Biro P. Schmerztherapien; Interventionelle Verfahren bei lumbalen Rückenschmerzen. *Leading Opinions Neurology & Psychiatry* 2006; 6: 34-37
7. Alon E, Biro P, Scheiner D. Schmerzmanagement bei gynäkologischen Patientinnen. Therapiekonzepte aus Sicht des Anästhesisten. *Gynäkologie* 2006; 11: 11-17

8. Alon E, Jaquenod M, Schaeppi B, Aeschbach A, Biro P. Schmerztherapien; Interventionelle Verfahren bei lumbalen Rückenschmerzen. *Leading Opinions Neurologie & Psychiatrie* 2006; 6: 34-37
9. Alon E, Biro P, Scheiner D. Schmerzmanagement bei gynäkologischen Patientinnen. *Therapiekonzepte aus Sicht des Anästhesisten*. *Gynäkologie* 2006; 11: 11-17
10. Evans E, Biro P, Bedford N. Jet Ventilation. *Continuing Education in Anaesthesia, Critical Care & Pain* 2007; 7: 2-5
11. Biro P. Jet ventilation for surgical interventions in the upper airway. *Anesthesiology Clinics of North America* 2010; 28: 397-409
12. Biro P. Difficult intubation in pregnancy. *Current Opinion in Anesthesiology* 2011; 24: 249-254
13. Biro P. The evolutionary reason for the need to secure the airway in anaesthesia. *Isr Med Assoc J* 2011; 13: 5-8
14. Biro P. The SensaScope - A new hybrid video intubation stylet. *Saudi Journal of Anaesthesia* 2011; 5: 411-413
15. Biro P. A topographically oriented, simple and informative formula to describe a difficult airway: F.R.O.N.T. *Anestezjologia i Ratownictwo* 2012; 6: 76-81
16. Biro P. In the jungle of airway devices: an attempt of a Linnean taxonomy. *Refresher Course Book, ESA Congress* 2012
17. Biro P, Maurer K. Ängste der Patienten vor einer Anästhesie - Welche Informationen kann der Hausarzt geben? *Praxis* 2015; 104: 283-286 DOI 10.1024/1661-8157/a001952
18. Biro P, Sermeus L, Jankovic R, Savić N, Onuțu AH, Ionescu D, Godoroja D, Gurman G. Basic features and clinical applicability of the "Preliminary Universal Surgical Invasiveness Score" (pUSIS); a multi-center pilot study. *Turk J Anaesthesiol Reanim* 2017; 45: 9-15, DOI: 10.5152/TJAR.2017.77785
19. Baulig W, Weber M, Beck Schimmer B, Theusinger OM, Biro P. Short-term general anaesthesia for retro-bulbar block in ophthalmic surgery generates no significant hypercapnia. *Journal of Clinical Monitoring and Computing* 2017, online March 2017, DOI 10.1007/s10877-017-0011-5
20. Mitre C, Mitre I, Gyöngyösi Z, Fülesdi B, Zdrehus C, Breazu C, Biro P. Clinical experiences with the FRONT formula for pre-operative airway assessment and documentation: a multi-centre study. *Turk J Anaesthesiol Reanim* 2017; 45: 225-30 DOI: 10.5152/TJAR.2017.97992
21. Ochsenbein-Kölble N, Krähenmann F, Hüsler M, Meuli M, Möhrle U, Mazzone RL, Biro P, Zimmermann R. Tocolysis for in utero surgery: atosiban performs distinctly better than magnesium sulfate. *Fetal Diagnosis and Therapy* 2017 Aug 17. doi: 10.1159/000478261
22. Müntz L, Schläpfer M, Biro P. Anesthetic drug choices by senior anesthetists: an observational analysis of medication habits in a tertiary hospital. *Turk J Anaesthesiol Reanim* 2018 ;46: 348-53 DOI: 10.5152/TJAR.2018.00236
23. Biro P, Fried E, Kristensen MS. A new retrograde transillumination technique for videolaryngoscopic tracheal intubation. *Anaesthesia* 2018, 73, 474–479. doi: 10.1111/anae.14217. PMID: 29345325

24. Kristensen MS, Fried E, Biro P. Infrared Red Intubation System (IRRIS) guided flexible videoscope assisted difficult airway management. *Acta Anaesthesiol Scand* 2018;62:19-25. doi: 10.1111/aas.13016
25. Biro P, Schlöpfer M. Tracheal intubation with channeled vs. non-channeled videolaryngoscope blades. *Romanian Journal of Anaesthesia and Intensive Care* 2018; 25: 97-101. DOI: /10.21454/rjaic.7518.252.sch
26. Ochsenbein-Kölble N, Krähenmann F, Hüsler M, Meuli M, Mazzone RL, Möhrle U, Biro P, Zimmermann R. Tocolysis for in utero Surgery: Atosiban Performs Distinctly Better than Magnesium Sulfate. *Fetal Diagnostics and Therapy* 2018; 44: 59-64. doi: 10.1159/000478261
27. Kristensen MS, Hesselfeldt R, Henning K, Brinkenfeldt HK, Biro P. Trans-cricothyroid infrared flashing light as guidance to awake intubation with a flexible bronchoscope – a randomised cross-over study. *Acta Anaesthesiol Scand* 2023 Jan 23, doi: 10.1111/aas.14204

Editorials

1. Biro P, Priebe, H.-J. Staged extubation strategy: Is an airway exchange catheter the answer? Editorial. *Anesthesia & Analgesia* 2007; 105: 1182-1185
2. Biro P. A proposal for a systematic classification of airway devices similar to Linnean taxonomy. *European Journal of Anaesthesiology* 2012; 29; 499-503
3. Biro P. A plea for an independent holistic anaesthesia delivery system. *European Journal of Anaesthesiology* 2013, 30:97–101
4. Akca O, Ball L, Belda FJ, Biro P, Cortegiani A, Eden A, Ferrando C, Gattinoni L, Goldik Z, Gregoret C, Hachenberg T, Hedenstierna G, Hopf HW, Thomas K, Hunt TK, Pelosi P, Qadan M, Sessler DI, Soro M, Mert Şentürk M. WHO Needs High FIO2? *Turk J Anaesthesiol Reanim* 2017; 45: 181-92 DOI: 10.5152/TJAR.2017.250701
5. Grande B, Kolbe M, Biro P. Difficult airway management and training: simulation, communication and feedback. *Curr Opin Anesthesiol* 2017, 30:743–747 DOI:10.1097/ACO.0000000000000523
6. Biro P, Paul G, Dahan A, Brull SJ. Proposal for a revised classification of the depth of neuromuscular blockade and suggestions for further development in neuromuscular monitoring. *Anesthesia & Analgesia* 2019;128:1361–1363. doi: 10.1213/ANE.0000000000004065. PMID: 30768458

Books

1. Biro P, Pasch T (Hrsg). *Die schwierige Intubation: Erschwert zugängliche Atemwege*. Verlag Hans Huber: Bern Göttingen Toronto 1995
2. Ruegger M, Jost M, Meier A, Knuti R, Schlatter C, Biro P, Jaer P, Klopfenstein CE. *Umgang mit Anästhesiasgasen*. SUVA, Arbeitsmedizin Nr 29, 1. Auflage, Juni 1997
3. Biro P, Pasch T (szerk). *A nehéz intubálás, avagy a nehezen biztosítható szabad légút. Problémák és azok gyakorlati megoldása*. Golden Book: Budapest, 1998
4. Biro P, Vagts D, Schultz U, Pasch T. *Anästhesie bei seltenen Erkrankungen*, 3rd Edn. Springer: Berlin Heidelberg New York 2004

5. Biro P, Vagts, D, Emmig U, Pasch T. Anästhesie bei seltenen Erkrankungen, 4th Edn. Springer: Berlin Heidelberg New York 2010
6. Biro P, Vagts, D, Emmig U, Pasch T. Anästhesie bei seltenen Erkrankungen, 5th Edn. Springer: Berlin Heidelberg New York 2022

Book chapters

7. Keller E, Biro P. Basisversorgung des Patienten. Sicherung der Atemwege. Schwab, Schellinger, Werner, Unterberg, Hacke. NeuroIntensiv, Springer, ISBN 13 978-3-540-23051-9
8. Biro P, Alon E. Anästhesie für den Kaiserschnitt. Michael Stark, Der Kaiserschnitt, Urban & Fischer, ISBN 3-437-24310-1
9. Georgi R, Henn-Beilharz A. Mann R, Biro P, Krier C. Hals-Nasen-Ohren-Heilkunde und Zahn-Mund-Kiefer-Gesichtschirurgie. In Kochs E, Adams HA, Spies C, Anästhesiologie (AINS), 2. Aufl., Thieme, S1043-1063, ISBN 978 3 13 114862 9
10. Biro P. Operative Anwendung der Jet Ventilation - Möglichkeiten und Grenzen. Eckart, Jäger, Möllhoff. Anästhesiologie, Ecomed, ISBN 978-3-609-71361-8
11. Biro P. Jet ventilation settings and setting changes. In Joint Papers on Jet Ventilation (ed. G.A. Baer). Tampere University Press, Tampere 2011, 58 p., ISBN 978-951-44-8488-9; p18-22
12. Biro P. Driving gas conditioning in jet ventilation. In Joint Papers on Jet Ventilation (ed. G.A. Baer). Tampere University Press, Tampere 2011, 58 p., ISBN 978-951-44-8488-9; p23-25
13. Biro P. Warum sich Atemweg und Gastrointestinaltrakt kreuzen und für Kopfschmerzen bei den Anästhesisten sorgen. In: Körper; Aspekte der Körperlichkeit in Medizin und Kulturwissenschaften. Eds. Josette Baer, Wolfgang Rother (Hrsg.), Schwabe, Basel 2012. ISBN 978-3-7965-2826-2
14. Biro P. Operative Anwendung der Jet Ventilation - Möglichkeiten und Grenzen. Eckart, Jäger, Möllhoff. Anästhesiologie, Ecomed, Heidelberg 2015, ISBN 978-3-609-71361-8
15. Biro P, Van de Velde M. Obstetric analgesia and anaesthesia. Oxford Textbook of Anaesthesia 1st Edition ("the Work") Eds. Jonathan Hardman, Philip Hopkins, Michel Struys. pp 1139-1160
16. Biro P. Jet Ventilation – How to Adequately Handle This Exotic Ventilation Technique and Earn the Admiration of Naïve Spectators. In Avoiding Common Anesthesia Errors (Lippincott Williams & Wilkins Handbook). ISBN-13: 978-0781788472
17. Nekhendzy V, Biro P. Chapter 38: Airway management in head and neck surgery, pp. 668-691. Hagberg CA, Artime CA and Aziz MF, Hagberg and Benumof's Airway Management, 4th ed., Elsevier, Philadelphia, PA, ISBN: 978-0-323-42881-1

Invited Lectures (excerpt)

1. Biro P. Artificial Intelligence in Airway management. Difficult Airway Society (DAS) E-Zine, 11 May 2021
2. Biro P. Anesthesia for and analgesia after in-utero repair of myelomeningocele. Nesa Days 2015, Conference Report, International Journal of Gynecology, Obstetrics and Neonatal Care

- 2015; 2: 40-41
3. Biro P, Maurer K. Ängste der Patienten vor einer Anästhesie - Welche Informationen kann der Hausarzt geben? Praxis 2015; 104: 283-286 DOI 10.1024/1661-8157/a001952
 4. Biro P. A topographically oriented, simple and informative formula to describe a difficult airway: F.R.O.N.T. Anestezjologia i Ratownictwo 2012; 6: 76-81
 5. Biro P. In the jungle of airway devices: an attempt of a Linnean taxonomy. Refresher Course Book ESA Congress 2012 (on CD only)
 6. Biro P. The SensaScope - A new hybrid video intubation stylet. Saudi Journal of Anaesthesia 2011; 5: 411-413
 7. Biro P. Difficult intubation in pregnancy. Current Opinion in Anesthesiology 2011; 24: 249-254
 8. Biro P. The evolutionary reason for the need to secure the airway in anaesthesia. Isr Med Assoc J 2011; 13: 5-8
 9. Biro P. Jet ventilation for surgical interventions in the upper airway. Anesthesiology Clinics of North America 2010; 28: 397-409
 10. Biro P, Priebe, H.-J. Staged extubation strategy: Is an airway exchange catheter the answer? Editorial. Anesthesia & Analgesia 2007; 105: 1182-1185
 11. Evans E, Biro P, Bedford N. Jet Ventilation. Continuing Education in Anaesthesia, Critical Care & Pain 2007; 7: 2-5
 12. Alon E, Jaquenod M, Schaeppi B, Aeschbach A, Biro P. Schmerztherapien; Interventionelle Verfahren bei lumbalen Rückenschmerzen. Leading Opinions Neurology & Psychiatry 2006; 6: 34-37
 13. Alon E, Biro P, Scheiner D. Schmerzmanagement bei gynäkologischen Patientinnen. Therapiekonzepte aus Sicht des Anästhesisten. Gynäkologie 2006; 11: 11-17
 14. Stocker R, Biro P. Airway management and artificial ventilation in intensive care. Current Opinion in Anesthesiology 2005; 18: 35-45
 15. Biro P. Videoassistierte Laryngoskopie und Intubation. SIGA-FSIA Anästhesie-Journal 2004; 3: 4-6
 16. Alon E, Biro P, Niv D. Gestational low back pain and headache during pregnancy: causes and treatment. International Monitor of Regional Anaesthesia and Pain Medicine 2004; 16: 3-5
 17. Külling D, Bauerfeind P, Fried M, Biro P. Patient-controlled analgesia and sedation in gastrointestinal endoscopy. Gastrointestinal Endoscopy Clinics of North America 2004; 14: 353-368
 18. Alon E, Biro P. Schmerzlinderung während der Schwangerschaft. Der Mediziner 2004; 8 (1): 20-22
 19. Biro P, Ultiva (Remifentanyl) für diagnostische und interventionelle Anwendungen. Balance 2002; 3: 8-11
 20. Biro P, Wiedemann K. Jetventilation und Anästhesie für diagnostische und therapeutische Eingriffe an den Atemwegen. Anaesthesist 1999; 48: 669-685
 21. Biro P. Transtracheal access and oxygenation techniques. Acta Anaesthesiologica

- Scandinavica 1998; 42 Suppl M82: S 168-170
22. Biro P, Schmid S. Anästhesie und Hochfrequenz-Jetventilation (HFJV) für operative Eingriffe an Larynx und Trachea. HNO 1997; 45: 43-52
 23. Alon E, Biro P. Prophylaxe und Behandlung von postoperativer Übelkeit und Erbrechen mit 5-HT3-Rezeptorenblockern. Anästhesiologie Intensivmedizin Notfallmedizin Schmerztherapie 1996; 31: 200-204
 24. Alon E, Biro P. Postoperative Epiduralanalgesie mit Lokalanästhetika und Opioiden. Refresher Course. Acta Anaesthesiologica Helvetica 1992; 1: 12-14
 25. Biro P, Alon E. Über Opioidantagonisten und ihre klinische Anwendung. Refresher Course. European Journal of Pain 1990; 11: 35-36
 26. Biro P, Gottschall R, Klein U, Wiedemann K: Jet-Ventilation - Grundlagen und klinische Anwendung der Jet-Beatmungstechnik, Wissenschaftlicher Lehrfilm, Cinema Studios, Hörstel-Dreierwalde 2001
 27. Gottschall R, Biro P, Klein U, Müller A, Wiedemann K: Jetventilation (Postervortrag und wissenschaftliches Video). 10. Jahrestagung der Vereinigung Mitteldeutscher Hals-Nasen-Ohrenärzte, Jena, 07.- 08.09.2001
 28. Biro P. Klinische Einführung in die Anästhesiologie. Medizinische Fakultät der Universität Zürich, 4. SJ, VVz.-Nr. 716, Herbstsemester 2010
 29. Biro P. Repetitorium Anästhesiologie. Medizinische Fakultät der Universität Zürich, 6. SJ, VVz.-Nr. 739, Frühjahrssemester 2010
 30. Biro P. Klinische Einführung in die Anästhesiologie. Medizinische Fakultät der Universität Zürich, 4. SJ, VVz.-Nr. 632, Herbstsemester 2009
 31. Biro P. Anästhesieverfahren in der Allgemein- und Viszeralchirurgie. Careum Bildungszentrum, Höhere Fachschule Pflege, Zürich, 4 November 2009
 32. Biro P. Repetitorium Anästhesiologie. Medizinische Fakultät der Universität Zürich, 6. SJ, VVz.-Nr. 643, Frühjahrssemester 2009
 33. Biro P, Spahn D.R. Postoperative Phase, Ausblick, Vorlesung für Studierende im 4. SJ (VVZ-Nr. 0600) an der medizinischen Fakultät der Universität Zürich, Herbstsemester 2008
 34. Biro P. Repetitorium Anästhesiologie (VVZ-Nr. 0718). Frühjahrssemester 2008, Vorlesung an der medizinischen Fakultät, Universität Zürich, März 2008
 35. Biro P. Repetitorium Anästhesiologie. FS 2007, Vorlesung an der medizinischen Fakultät, Universität Zürich, März 2007
 36. Biro P. Repetitorium Anästhesiologie. WS 2005/2006, Vorlesung an der medizinischen Fakultät, Universität Zürich, März 2006
 37. Biro P. Repetitorium Anästhesiologie. WS 2004/2005, Vorlesung an der medizinischen Fakultät, Universität Zürich, März 2005
 38. Biro P. Repetitorium Anästhesiologie. WS 2003/2004, Vorlesung an der medizinischen Fakultät, Universität Zürich, März 2004
 39. Biro P. Repetitorium Anästhesiologie. WS 2003/2004, Vorlesung an der medizinischen Fakultät, Universität Zürich, Februar 2002

40. Biro P. Repetitorium Anästhesiologie. WS 2002/2003, Vorlesung an der medizinischen Fakultät, Universität Zürich, 17-19 März 2003
41. Biro P. Kein weites Feld - Beatmung und Anästhesie für Atemwegseingriffe. Antrittsvorlesung an der medizinischen Fakultät, Universität Zürich, 19 Januar 2002
42. Biro P. Visualisierung von Vortrags- und Unterrichtsinhalten. Fortbildungsreihe der Arbeitsstelle für Hochschuldidaktik AfH "Hochschuldidaktik über Mittag", WS 2000/2001, Universität Zürich, 14 und 21 November 2001
43. Biro P. Repetitorium Anästhesiologie. WS 1999/2000, Vorlesung an der medizinischen Fakultät, Universität Zürich, 6-8 Februar 2000
44. Biro P. Intravenöse Anästhetika, Muskelrelaxantien. Vorlesung von Prof. Dr. T. Pasch "Anästhesiologie und Wiederbelebung" WS 1999/2000, Medizinische Fakultät, Universität Zürich
45. Biro P. Nichtopioidanalgetika und Adjuvantien in der Schmerzbehandlung. Vorlesung von PD Dr. E. Alon "Anästhesiologische Aspekte der Schmerzbehandlung" WS 1994/1995, Medizinische Fakultät, Universität Zürich
46. Biro P. Die Überwindung der Erfahrung als Bedingung, Künstliche Intelligenz und Roboterunterstützung für die tracheale Intubation. "Recht am See" Symposium des Bund Deutscher Anästhesisten, Prien am Chiemsee, 18.3.2023
47. Biro P. Methods of Relaxometry. What are the differences and what do they mean? 20th Annual Indoanesthesia Congress (virtual), Jakarta (Indonesia), 13-14 February 2023
48. Biro P. Theoretical and practical considerations of JV in airway interventions, Dept. Of Anesthesiology, Military Hospital Krakow, Poland, 16.1.2023
49. Biro P und Ganz Ph. Künstliche Intelligenz für roboterunterstützte Behandlungen, 14. Innovation Forum Medizintechnik Tuttlingen, 20.10.2022
50. Biro P. Combining artificial intelligence with robotic assistance for tracheal intubation, Interdisciplinary Education Course, Denia Hospital, Denia, Spain, 22.7.2022
51. Biro P. Combining artificial intelligence with robotic assistance for tracheal intubation, Qatar Conference on Airway Management in Special Circumstances, May 5-7, 2022, Qatar Itqan Clinical Simulation Centre, Doha, Qatar
52. Biro P. Anesthesiological considerations in interventional bronchoscopy, 19th Indoanesthesia, Jakarta Indonesia, 13 February 2022
53. Biro P. Künstliche Intelligenz und Roboterunterstützung für die tracheale Intubation, 15 Januar 2022
54. Biro P. 34 Jahre IFA - Aus dem Arbeitsleben eines Scharlatans, 15 Dezember 2021
55. Biro P. Artificial Intelligence and robotic assistance in airway management, 1st International Anesthesiology and Reanimation Symposium of the University of Health Sciences, Istanbul, 3 December 2021
56. Biro P. Profound neuromuscular block for specific surgical interventions. International Conference on Anesthesiology and Intensive Care "Black Sea Pearl", August 27-29, 2021, Odessa, Ukraine
57. Biro P. Combining artificial intelligence and robotic assistance for tracheal intubation.

- International Airway Management Meeting 2021, 22-23 May 2021
58. Biro P. What patients ask and should be told about anesthesia related morbidity and mortality. 17th Annual Indoanesthesia Congress (virtual), Jakarta (Indonesia), 13-14 February 2021
 59. Biro P. REALITI wird "reality". Fortschritte auf dem Weg zur robotergesteuerten, automatischen Intubation. Atemweg im Lichte: "Modernes" Airway-Management, Kantonsspital Winterthur, 20 Oktober 2020
 60. Biro P. REALITI finally becomes reality. Video presentation. Department of Anesthesiology, Carmel Hospital Haifa, Israel, 18 June 2020
 61. Biro P. REALITI finally becomes reality. 17th Annual Indoanesthesia Congress, Jakarta (Indonesia), 13-15 February 2020
 62. Biro P. New perspectives in airway management by robot-assisted light-guiding. III International Congress of Georgian Society of Anesthesiology and Critical Care Medicine. Tbilisi, Georgia, 8-10 November 2019
 63. Biro P. Why make friends with your anesthesiologist: Innovation in Complex Hernia Repair - The Anesthetist's Perspective, Hernia Days Symposium, Basel, 12 September 2019
 64. Biro P. Basics of neuromuscular blockade and its monitoring, Department of Anesthesia and Intensive Care, O. Fodor Regional Institute of Gastroenterology and Hepatology, University of Cluj-Napoca (Romania), 5 Juli 2019
 65. Biro P. Improving Outcome of Surgery and Anesthesia for the Patients' Benefit. MSD Symposium «Clinical Anesthesia Program: Enhancing the Perioperative Experience», Congress Hall of Marina Hotel, Kuwait City, 23 Juni 2019
 66. Biro P. Kompartmentsyndrom des Unterschenkels als Komplikation einer roboter-assistierten radikalen Prostatektomie. M&M-Konferenz und Fallbesprechung, Monatliche Fortbildungsreihe des Instituts für Anästhesiologie, Universitätsspital Zürich, 13.3.2019
 67. Biro P. New aspects of light guiding for airway management. 16th Annual Indoanesthesia Congress, Jakarta (Indonesia), 21-23 February 2019
 68. Biro P. Wie Anästhetika ihren Weg zum Nervensystem finden. Diskussionsforum Rezepturen Teil 2, Von der langen Suche zum täglichen Gebrauch: Rezepturen in Forschung, Industrie und Klinik. Departement Chemie und Angewandte Biowissenschaften, Eidgenössische Technische Hochschule (ETH), Zürich, 5.10.2018
 69. Biro P. Spinal anesthesia in the ambulatory setting. 5th international congress of the Moldovan Society of Anesthesiologists. Kishinev, Republic of Moldova, 27-29 September 2018
 70. Biro P. Optimization of surgical conditions by choosing appropriate relaxometry stimulation patterns, Euroanaesthesia 2018, Copenhagen (DK), 4.6.2018.
 71. "Biro P. Tracheale Intubation unter besonderen Umständen, z.B. auf der Intensivstation. Monatliche Fortbildung der Klinik für Intensivmedizin, UniversitätsSpital Zürich, 14.5.2018
 72. Biro P. Physical, technical and physiological conditions and limitations of jet ventilation. Jet Ventilation Symposium, University of Szeged, Szeged (H), 20.4.2018.
 73. Biro P. Clinical applicability and relevance of surgical invasiveness scores. Networks in Anaesthesiology and Surgery, Rome (I), 8-9 March 2018
 74. Biro P. Steering of neuromuscular blockade according to varying surgical and

- anesthesiological needs. 15th Annual Indoanesthesia Congress, Jakarta (Indonesia), 22-24 February 2018
75. Biro P. Anästhesie für «MMC repair». Ein nicht ganz alltägliches Unterfangen. Symposium Fötalchirurgie: Resultate der ersten 60 Fälle. Universitätsspital Zürich, 7.12.2017
 76. Biro P. Other than mainstream regional anesthesia techniques. Anesthesia techniques for awake fiberoptic intubation. ESA Focus Meeting on Perioperative Medicine, Tel Aviv, Israel on 9-10 November 2017
 77. Biro P. Oxygen for life and mitochondria. 51th Congress on Anesthesiology and Reanimation of Turkish Society of Anesthesiology and Reanimation (TARK 2017), Antalya, Turkey, 25-29 October 2017
 78. Biro P. Fine tuning of neuromuscular relaxation according to surgical needs. 5th World Congress in Total Intravenous Anaesthesia - TCI, Timisoara (Romania), 28-30 September 2017
 79. Biro P. Steering neuromuscular relaxation during robot-assisted urological operations. 8th Annual Spring Scientific Symposium in Anesthesiology and Intensive Care, Niš, Serbia, 21-23 April 2017
 80. Biro P. Management of the difficult airway in obstetric anaesthesia. 1st World Congress on Anesthesia for Obstetrics, Bali, Indonesia, 24.-25. February 2017
 81. Biro P. Bättig U, Albert C, Meyer S, Kägi B. Action and interaction. Anesthesia, Anesthetics and the Uterus. Third Workshop of the European Club for Fetal Surgery (ECFS). Sils i.E., Switzerland, 25-27 January 2017
 82. Biro P. What to expect from airway in late pregnancy. The Difficult Airway Society, Annual Meeting 2016 in Torquay UK, 16.-18. November 2016
 83. Biro P. The distinction between the predicted vs. the unpredicted difficult airway. 50th Congress on Anesthesiology and Reanimation, 26-30 October 2016, Istanbul, Turkey
 84. Biro P. Orale und nasale Intubation inkl. Spezialtechniken. Fortbildungsreihe Chirurgische und Medizinische Intensivmedizin, Universitätsspital Zürich, 26 September 2016
 85. Biro P. The Universal Surgical Invasiveness Score (USIS). Cleveland Clinic - Salzburg Anesthesia Symposium, Salzburg, Austria, 17-18 Juni 2016
 86. Biro P. Optimum Jet Ventilation. Annual ESA Congress, London, 29 Mai 2016
 87. Biro P. Different Approaches to the Unpredicted vs. the Predicted Difficult Airway. 13th Annual Indoanesthesia Congress, Jakarta (Indonesia), 26-27 February 2016
 88. Meyer S, Albert C, Bättig U, Biro P. Interwined hemodynamics. 2nd Workshop of the European Club for Fetal Surgery (ECFS), Sils Maria CH, 20-22 Januar 2016
 89. Biro P. Blutungskomplikationen in der Geburtshilfe. 3. Regensburger Adventssymposium „Update Anästhesie – Altbewährtes und Neues“. Universitätsklinikum Regensburg, 12. Dezember 2015
 90. Kandler L, Biro P. Anästhesie bei speziellen Lagerungen. Mitgliederversammlung des Vereins Bernischer Anästhesiologen VBA, Inselspital Bern, 20.11.2015
 91. Biro P. Management of the unpredicted difficult intubation. New European Surgical Academy (NESA) Days 2015 Conference Berlin, Germany 18.–20.09.2015

92. Biro P. Should we continue to distinguish anticipated from unanticipated difficult airway management? Pro: they are different in teaching, preparing and managing. Annual ESA Congress, Berlin, 1.6.2015
93. Biro P. How to perform anesthesia and jet ventilation for upper airway surgery. Wolfson Hospital, Holon IL, 3.5.2015
94. Biro P. Anesthesia in ENT surgery - The case for jet ventilation. Networks in Anaesthesiology – An MSD-Sponsored Stand-Alone Scientific Symposium, Madrid (E), 5–6 February 2015
95. Biro P. Anesthesia for MMC repair - A tightrope walk. First workshop of the European Club for Fetal Surgery (ECFS), Sils Maria CH, 14-16 Januar 2015
96. Biro P. Orale und nasale Intubation inkl. Spezialtechniken. Fortbildungsreihe Chirurgische und Medizinische Intensivmedizin, Universitätsspital Zürich, 15. Dezember 2014
97. Biro P. Fallbericht: Ein Atemwegs-Disaster in der Geburtshilfe. 13. St. Galler Airway-Symposium, 22 November 2014
98. Biro P. Management of the unexpected failed intubation. 25th Annual Meeting of the European Society for Computing and Technology in Anesthesia and Intensive Care (ESCTAIC), Timisoara, Romania, 23-25 October 2014
99. Biro P. Was der Hausarzt über Anästhesie wissen soll: Ängste von Patienten wegen PONV & „awareness“. Medidays 2014: Allgemeiner Fortbildungskurs der Medizinischen Fakultät Zürich, 1.-5. September 2014"
100. Biro P. What is really difficult and to which extent? Quantitative and qualitative aspects of airway difficulties. Airway management Symposium, Cluj-Napoca, Romania, 20 Juni 2014
101. Biro P. Jet ventilation. The state of the art. Grand Rounds at the Universitair Ziekenhuis Brussels, Vrije Universiteit Brussels, Belgium, 24 April 2014
102. Biro P. «Oxygen for the brain» oder die Quintessenz des Atemwegsmanagements in der Anästhesie. Swiss Medical Students Congress, Universität Zürich, 22 März 2014
103. Biro P, Alkandari Z, Spahn DR. Quality control in anesthesia. Indoanesthesia Congress 2014, Jakarta, Indonesia, 14.-16. Februar 2014
104. Biro P. Jet-Ventilation: Grundlagen, klinische Anwendung, Kontraindikationen. 3. Repetitorium Anästhesiologie Augsburg. Klinikum Augsburg, 20. Januar 2014
105. Biro P. Settings and setting changes during jet ventilation, 2nd European Airway Congress, Istanbul, 5-7 December 2013
106. Biro P. Management der unvorhergesehenen schwierigen Intubation, Universitätsklinikum Köln, 22.10.2013
107. Biro P. Klinische Anwendung der Jetventilation in der Atemwegschirurgie, Klinik für Anästhesiologie und Intensivmedizin, Medizinische Hochschule Hannover, 16.9.2013
108. Biro P. General anesthesia for caesarean section: What's new?, Annual Congress of the European Society of Anesthesiology, Barcelona 31.5.-4.6.2013
109. Biro P. Management of the unpredicted failed intubation when intubation is really necessary. Fifth annual spring scientific symposium in anaesthesiology and intensive care. University of Nish, School of Medicine, Nish 19.-21. April 2013

110. Biro P. «She was young, pregnant and obese and surprisingly I couldn't intubate her »- How we solve such problem in Zurich. Grand round lecture, Service d'anesthesiologie, CHUV Lausanne, 21.3.2013
111. Biro P. MAID - A novel anesthesia ventilator. Indoanesthesia Congress 2013, Jakarta, Indonesia, 18.-21. Februar 2013
112. Biro P. Warum sich Atemweg und Gastrointestinaltrakt kreuzen und für Kopfschmerzen bei den Anästhesisten sorgen. Fortbildungsveranstaltung "Pharmazeutische Medizin: Klinische Forschung im akademischen Umfeld", Universitätsspital Zürich, 8.11.2012
113. Biro P. Jet ventilation for upper airway surgery: Possibilities and limitations. 6th International Baltic Congress of Anaesthesiology and Intensive Care. Vilnius, Lithuania, 18.-20.10.2012
114. Biro P. The jungle of airway devices: an attempt of a Linnean taxononymy. Annual Congress of the European Society of Anaesthesiologists (ESA), Paris, France, 10.6.2012
115. Biro P. Management of the failed intubation. Residents' Education Course, Department of Anesthesia, Stanford University Medical Center, Palo Alto CA, 7.5.2012
116. Biro P. Management der unerwartet schwierigen Atemwegssituation, Fortbildungsseminar der Klinik für Oto-Rhino-Laryngologie, UniversitätsSpital Zürich, 1.03.2012
117. Biro P. Anästhesie und Analgesie der Gebärenden: Einflüsse auf das Kind. "Analgesie beim Neugeborenen", Fortbildungsseminar für Neonatologie, UniversitätsSpital Zürich, 12.01.2012
118. Biro P. Warum sich Atemweg und Gastrointestinaltrakt kreuzen und für Kopfschmerzen bei den Anästhesisten sorgen, PD-Ringvorlesung "Körper", Universität Zürich, 12 Oktober 2011
119. Biro P. Unpredicted failed intubation; the Zurich Difficult Intubation Protocol and Training Program. 22nd International Conference of the Israel Society of Anesthesiologists, Tel Aviv 13 September 2011
120. Biro P. Management of the unexpected difficult intubation. Postgraduate education course Grand Round, Department of Anesthesiology, University of Washington Medical Center, Seattle WA, 8 June 2011
121. Biro P. Operative Anwendung der Jet-Ventilation - Möglichkeiten und Grenzen: Fortbildungsveranstaltung der Deutschen Akademie für Ärztliche Fortbildung, Augsburg, 16. März 2011
122. Biro P. Systemische patientenkontrollierte Analgesie (PCA) sub partu. "Schmerzen und Schwangerschaft": Fortbildungsveranstaltung der Klinik für Geburtshilfe, Universitätsspital Zürich, 21. Oktober 2010
123. Biro P. Improving patient comfort and outcome of surgery; The Multi-Modal Approach to Postoperative Analgesia. Bristol-Myers Squibb-Fortbildung, Zug, 17 August 2010
124. Biro P. Crisis management of the unexpected difficult airway. Postgraduate education course of the Department of Anesthesiology, Medical Faculty, Puznan University, Poland, 9 July 2010
125. Biro P. The 4 drawers airway cart concept. Annual Congress of the European Society of Anaesthesiologists (ESA), Helsinki, Finland, 14 Juni 2010
126. Biro P. Epidemiology and principles of the difficult airway and the Zurich difficult airway training course. Postgraduate education course of the Department of Anesthesiology, Medical University of Plovdiv, Bulgarien 19 Mai 2010

127. Biro P. Das "Difficult Airway Management"-Konzept des Instituts für Anästhesiologie am Unispital Zürich. 21.4.2010, Universitätsspital Zürich
128. Biro P. Management of the unexpected difficult airway in the anesthetized and paralyzed patient. Postgraduate education course of the Department of Anesthesiology, Carmel Hospital Haifa, Israel, 28.3.2010
129. Biro P. Modern Jet Ventilation Techniques for Airway Surgery. Committee for European Education in Anaesthesiology (CEEAA) course on Respiration, Moscow (RU), 8-10 October 2009
130. Biro P. Epidemiology of the difficult airway. Expected and unexpected airway problems. "The Difficult Airway" symposium, Budapest (H), 25-26 September 2009
131. Biro P. Der Aussenseiter. Desfluran in der klinischen Anwendung. Fortbildungsveranstaltung am Kantonsspital Winterthur, 17 August 2009
132. Biro P. Epidemiology and systematics of the difficult airway, The 1st Educational Symposium on the Difficult Airway, University of Montenegro, Podgorica (MTN), 26-27 June 2009
133. Biro P. New devices in the modern management of the difficult airway. Annual Congress of the Romanian Society of Anaesthesiology and Intensive Therapy, Sinaia (RO), 13-17 May 2009
134. Biro P. Epidemiology and systematics of the difficult airway, The 3rd Educational Symposium on the Difficult Airway, University of Novi Sad, Novi Sad (SRB), 20-21 March 2009
135. Biro P. The Difficult Airway as a core issue in anesthesiology. 21st International Congress of the Israel Society of Anesthesiologists, Tel Aviv (IL), 16.9.2008
136. Biro P. Atemwegssicherung und Beatmung in der Anästhesie, Fortbildungsveranstaltung der Israel Medical Association (IMA), Zürich (CH), 31 August 2008
137. Biro P. Video assisted airway management techniques. Annual Congress of the European Society of Anaesthesiology, Copenhagen (DK), 30.5.-2.6.2008
138. Biro P. Anästhesiologisches Management bei schwangerschaftsassozierten Multiorganerkrankungen (Präeklampsie, Eklampsie, HELLP-Syndrom), Frühlingskongress 2008 der Schweizerischen Interessengemeinschaft für Anästhesiepflege (SIGA - FSIA), Luzern (CH), 19 April 2008
139. Biro P. Case Report: Cesarean section of a woman with omphalopagos gemini, Spring meeting of the Swiss Association for Obstetric Anesthesia (SAOA), Lausanne (CH), 1 März 2008
140. Biro P. Perioperatives Volumenmanagement. Blockkurs Gynäkologie, Universitätsspital Zürich, 17 November 2007
141. Biro P. The role of jet ventilation in the management of the difficult airway. Airway Management Course during the 41th National Congress of Turkish Society of Anesthesiology and Reanimation, Beldibi/Antalya (TR), 24-25 October 2007
142. Biro P. Pharmakokinetik der volatilen Anästhetika; Die klinische Bedeutung der physikochemischen Eigenschaften. Zürcher Anästhesiesymposium "Update Inhalationsanästhesie" Universitätsspital Zürich, 14 September 2007
143. Biro P. The role of jet ventilation in airway management. Refresher Course, European Society of Anesthesiologists Annual Congress, München (D), 9-12 June 2007

144. Biro P. Improving patient comfort and outcome of surgery: the multi-modal approach to postoperative analgesia. VII. Pfingstkongress der Deutsch-Türkischen Gynäkologengesellschaft, Beldibi/Antalya (TR), 16-20 May 2007
145. Biro P. Der Aussenseiter - Desfluran in der klinischen Anwendung. Fortbildung der Anästhesieabteilung am Limattalspital, Schlieren (CH), 30 April 2007
146. Biro P. Video assisted airway management for the regular and the difficult airway. 1st Serbian Airway Management Workshop, Novi Sad (SRB), 22-24 März 2007
147. Biro P. Das Anästhesieteam in der Schweiz. MAFA-Workshop, Helios Research Center, Wuppertal (D), 9 Februar 2007
148. Biro P. Akute postoperative Schmerztherapie: Bedürfnisse und Möglichkeiten. Bristol-Myers Squibb-Fortbildung, Zug (CH), 17 Januar 2007
149. Biro P. ENT use of jet ventilation. ENT/Head & Neck Anaesthesia Course and The European Society for Jet Ventilation Meeting, London (UK), 30 November-1 December 2006
150. Biro P. Desfluran in der klinischen Anwendung, Fortbildungsveranstaltung der Anästhesieabteilung am St. Anna-Hospital, Luzern (CH), 4 Juli 2006
151. Biro P. Desfluran in der klinischen Anwendung, Fortbildungsveranstaltung der Vereinigung Bündner Anästhesieärzte, Chur (CH), 16 Juni 2006
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