Lung-protective ventilation in intensive care unit and operation room

Tidal volume size, level of positive end-expiratory pressure and driving pressure

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Publications A Serpa Neto

Neto AS, Pereira VG, Espósito DC, Damasceno MC, Schultz MJ.
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Serpa Neto A.
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Serpa Neto A, Pereira VG, Manetta JA, Espósito DC, Schultz MJ.
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*Serpa Neto. List of publications*
**Serpa Neto A, Assunção MS, Pardini A, Silva E.**
Feasibility of transitioning from APACHE II to SAPS III as prognostic model in a Brazilian general intensive care unit. A retrospective study.
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**Serpa Neto A**, Schultz MJ, Gama de Abreu M.
Intraoperative ventilation strategies to prevent postoperative pulmonary complications: Systematic review, meta-analysis, and trial sequential analysis.

Güldner A, Kiss T, **Serpa Neto A**, Hemmes SN, Canet J, Spieth PM, Rocco PR, Schultz MJ, Pelosi P, Gama de Abreu M.
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*Serpa Neto. List of publications*
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**Serpa Neto A**, Schultz MJ, Festic E.
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*Intensive Care Med* 2016; 42(1):100-3

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Schouten LR, Veltkamp F, Bos AP, van Woensel JB, **Serpa Neto A**, Schultz MJ, Wösthen-van Asperen RM.

Güldner A, Kiss T, **Serpa Neto A**, Hemmes SN, Canet J, Spieth PM, Rocco PR, Schultz MJ, Pelosi P, Gama de Abreu M.
In Reply.
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Barbas CS, **Serpa Neto A**.
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**Serpa Neto. List of publications**
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Diament D, Colombari F, Cypriano AS, Lisboa LF, Dos Santos BF, Cendoroglo Neto M, **Serpa Neto A**, Silva E.  
Georeferencing of deaths from sepsis in the city of São Paulo.  
*Braz J Infect Dis* 2016; 20(2):149-54

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Taniguchi C, Carneiro-Cazati D, Timenetsky KT, Saghabi C, Azevedo CS, Correa NG, Schettino GP, Eid RA, **Serpa Neto A**.  
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*Intensive Care Med* 2016; 42(11):1672-84

Moreira FT, **Serpa Neto A**.  
Sedation in mechanically ventilated patients-time to stay awake?  

Hemmes SNT, **Serpa Neto A**, Gama de Abreu M, Pelosi P, Schultz MJ.  
Intraoperative ventilation: Improving physiology or preventing harm?  

Glas GJ, **Serpa Neto A**, Horn J, Cochran A, Dixon B, Elamin EM, Faraklas I, Dissanaike S, Miller AC, Schultz MJ.  
Nebulized heparin for patients under mechanical ventilation: an individual patient data meta-analysis.
**Ann Intensive Care** 2016; 6(1):33


**Serpa Neto A.** Schultz MJ. Optimizing the settings on the ventilator settings: High PEEP for all? *JAMA* 2017; 317(14):1413-4


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The LAS VEGAS study Investigators for the PROVE Network, and the Clinical Trial Network of the European Society of Anaesthesiology; Hemmes SNT, *Serpa Neto A*, Gama de Abreu M, Pelosi P, Schultz MJ.
Epidemiology, practice of ventilation and outcome for patients at increased risk of postoperative pulmonary complications (LAS VEGAS): An observational study in 29 countries.
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*Serpa Neto A*, Schultz MJ.
Known and Unknown Potentially Modifiable Factors Contributing to Outcome in Brain Injured Patients who Need Mechanical Ventilatory Support.

Moreira FT, Campos NS, *Serpa Neto A*.
With or Without ARDS: Evidence Regarding PEEP Levels.

Tafner PFA, Chen FK, Filho RR, Correa TD, Chaves RCF, *Serpa Neto A*.
Recentes avanços na avaliação da microcirculação à beira-leito em pacientes graves.
*Rev Bras Ter Intensiva* 2017; [in press]

The role of thromboelastometry in the assessment and treatment of coagulopathy in liver transplant patients.
*Einstein* 2017; [in press]

Hemmes SNT, Ball L, *Serpa Neto A*, Gama de Abreu M, Pelosi P, Schultz MJ.
Are Height and Weight Estimates in ED Patients Reliable for Setting the Ventilator?

Readmission to Intensive Care Unit: Incidence, Risk Factors, Resource Use and Outcomes: A Retrospective Cohort Study.
*Ann Am Thorac Soc* 2017; [in press]

Pfeilsticker F, *Serpa Neto A*.
‘Lung-Protective’ Ventilation in ARDS: Still a Challenge?
*J Thorac Dis* 2017; [in press]

*Serpa Neto. List of publications*
Serpa Neto A, Mekontso Dessap A, Papazian L.
Focus on ARDS.
*Intensive Care Med* 2017; [in press]

Submitted manuscripts

Potentially modifiable factors contributing to outcome in patients without ARDS under invasive mechanical ventilatory support – a secondary analysis of PRoVENT.

Impact of ventilator settings in patients with ARDS undergoing extracorporeal carbon dioxide removal: A pooled individual patient data analysis.

Subphenotypes in patients undergoing general anesthesia for ventilation during open abdominal surgery: An unbiased cluster analysis from the PROVHILO trial.

Risk stratification Using SpO\textsubscript{2} to FiO\textsubscript{2} ratios and PEEP at Initial ARDS Diagnosis and after 24 Hours in Patients with Moderate or Severe ARDS.

Serpa Neto. List of publications
PhD portfolio

PhD student: A. Serpa Neto
Supervisors: Prof. dr. M.J. Schultz and prof. dr. P. Pelosi
PhD period: September 2016 – September 2017

PhD Training

Presentations


Peri-operative blood transfusion and higher tidal volumes are independently associated with the development of postoperative ARDS: An individual data meta-analysis of studies of protective ventilation for surgery. Poster presentation at American Thoracic Society (ATS) International Conference

Practice of ventilation in critically ill patients without ARDS at start of mechanical ventilation (PRoVENT) – An international observational study. Oral presentation at Annual Congress of the European Society of Intensive Care Medicine

Associations between ventilator settings during extracorporeal membrane oxygenation and outcome in patients with acute respiratory distress syndrome: A pooled individual patients data analysis. Oral presentation at Annual Congress of the European Society of Intensive Care Medicine

International conferences

VII International Symposium on Intensive Care and Emergency for Latin America
American Thoracic Society International Conference
Annual Update in Anesthesia and Perioperative Care
VIII International Symposium on Intensive Care and Emergency for Latin America

Year ECTs

2014 0.3
2014 0.5
2014 0.5
2014 0.3
2016 0.3
2016 0.3
2013 0.75
2014 0.75
2014 0.75
2015 0.75

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The Update on Intraoperative Ventilation: Shining light on the latest developments
Euroanesthesia 2015 0.75
Annual Congress of the European Society of Intensive Care Medicine 2016 0.75
IX International Symposium on Intensive Care and Emergency for Latin America 2017 0.75
Euroanesthesia 2017 0.75

**Teaching**

**Student coaching and mentoring**
Scientific Initiation, Medicine, Faculdade de Medicina do ABC (Felipe Ko Chen) 2016 1.0
Scientific Initiation, Medicine, Faculdade de Medicina do ABC (Philipe Franco do Amaral Tafner) 2016 1.0
Scientific Initiation, Medicine, Hospital Israelita Albert Einstein (Leticia Meneghini) 2016 1.0
Scientific Initiation, Medicine, Hospital Israelita Albert Einstein (Vittorio D'Angelo) 2017 1.0
Master’s Degree, Health Science, Hospital Israelita Albert Einstein (Carolina Sant’Anna A Azevedo) 2016 1.0
Master’s Degree, Health Science, Hospital Israelita Albert Einstein (Carin Ferreira Lopes) 2016 1.0
Master’s Degree, Health Science, Hospital Israelita Albert Einstein (Rafael Ladeira Rosa Bocchile) 2016 1.0
Master’s Degree, Health Science, Hospital Israelita Albert Einstein (Camila de Menezes Succi) 2016 1.0
Master’s Degree, Health Science, Hospital Israelita Albert Einstein (David Pablo da Cunha Jolvino) 2017 1.0

**Lecturing**

*Set up ventilator parameters in Normal Lungs.* Lecture at VIII International Symposium on Intensive Care and Emergency for Latin America 2015 0.5
*The new player on the field – Driving pressure.* Lecture at The Update on Intraoperative Ventilation: Shining light on the latest developments 2015 0.5
*Postoperative pulmonary complications: lessons from observational studies on mechanical ventilation.* Lecture at Euroanaesthesia 2017 0.5

**Other activities**
Professor of Epidemiology in the Post-Graduation at Hospital Israelita Albert Einstein 2014 – 13.5
Professor of Biostatistics in the Post-Graduation at Hospital Israelita Albert Einstein 2014 – 13.5
Intensive Care Journal Club (weekly) 2015 – 13.5
Coordinator of the Discipline of Biostatistics in the Post-Graduation at Hospital Israelita Albert Einstein 2017 – 13.5
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- Scientific Initiation Grant from the Programa Institucional de Bolsas de Iniciação Científica (PIBIC/CNPq) 2008
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**Awards**

- Award in Academic Congress, Faculdade de Medicina do ABC, São Paulo 2008
- Award in Academic Congress, Faculdade de Medicina do ABC, São Paulo 2009
- Award Researcher of the Future, Sociedade Brasileira de Profissionais de Pesquisa Clínica, São Paulo 2009
- Award in Academic Congress, Faculdade de Medicina do ABC, São Paulo 2010
- Professor Eric Roger Wroclawski Award, Sociedade Beneficente Israelita Albert Einstein, São Paulo 2010
- Professor Eric Roger Wroclawski Award, Sociedade Beneficente Israelita Albert Einstein, São Paulo 2011
- Resident Honored by the XXXVIII Class, Faculdade de Medicina do ABC, São Paulo 2011
Curriculum Vitae

Ary Serpa Neto was born on 08 July 1985 in São Paulo, Brazil, where he spent his whole life until now. Ary graduated from high-school at the Pueri Domus in São Paulo. In 2004 he commenced with her Medical studies at the Faculdade de Medicina do ABC, São Paulo, Brazil. During his studies he had a special interest in Critical Care and Oncology. After obtaining his doctors degree in 2009 he started residence in Internal Medicine at the same University, which finished in 2012. In 2014 he graduated an intensivist in Hospital Israelita Albert Einstein. Since then, he works as a physician in the Department of Critical Care at the Hospital Israelita Albert Einstein and as a researcher in the Research Institute at the same hospital. Meanwhile, dr. Serpa Neto had become acquainted with prof. dr. Marcus J. Schultz (Amsterdam, the Netherlands), who supervised the work presented in this thesis together with prof. dr. Paolo Pelosi (Genoa, Italy) and prof. dr. Marcelo Gama de Abreu (Dresden, Germany). Next to his clinical activities, dr. Serpa Neto is actively involved in several running research projects related to this PhD projects, and other projects under the umbrella of the PROtective VEntilation (PROVE) network (www.provenet.eu).
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