## Most Influential Publications in Perioperative Sleep Medicine in 2015-17

#### Susana Vacas MD, PhD

Department of Anesthesiology & Perioperative Medicine University of California Los Angeles





#### Conflicts of interest

None









**Search results** 

Items: 1 to 50 of 4173569





#### Public Relevance





#### Public Relevance

## Prevalence of sleep-disordered breathing in the general population: the HypnoLaus study

RHeinzer, SVat, PMarques-Vidal, HMarti-Soler, DAndries, NTobback, VMooser, MPreisig, AMalhotra, GWaeber, PVollenweider, MTafti,\*
I Haba-Rubio\*

Lancet Resp# Med 2015; 3: 310-18





#### Lack of Institutional Policies

## Perioperative management of patients with obstructive sleep apnea: a survey of Canadian anesthesiologists

Ligia Cordovani, MD · Frances Chung, MBBS · Geneviève Germain, MD · Kim Turner, MD · Alexis F. Turgeon, MD · Richard Hall, MD · Peter C. Gay, MD · Gregory L. Bryson, MD · Peter T. Choi, MD · for the Canadian Perioperative Anesthesia Clinical Trials Group

Can J Anesth/J Can Anesth (2016) 63:16-23

## Mismanagement of obstructive sleep apnea may result in finding these patients dead in bed

Jonathan L. Benumof, MD

Can J Anesth/J Can Anesth (2016) 63:3-7





#### Public Relevance

## Association of incident obstructive sleep apnoea with outcomes in a large cohort of US veterans

Miklos Z Molnar, <sup>1</sup> Istvan Mucsi, <sup>2,3</sup> Marta Novak, <sup>3,4</sup> Zoltan Szabo, <sup>5,6</sup> Amado X Freire, <sup>7</sup> Kim M Huch, <sup>8</sup> Onyebuchi A Arah, <sup>9</sup> Jennie Z Ma, <sup>10</sup> Jun L Lu, <sup>1</sup> John J Sim, <sup>11</sup> Elani Streja, <sup>12</sup> Kamyar Kalantar-Zadeh, <sup>12</sup> Csaba P Kovesdy <sup>1,8</sup> *Thorax* 2015;**70**:888–895.





#### Mechanisms





#### Acute brain injury in newly diagnosed OSA patients

#### Global and Regional Brain Non-Gaussian Diffusion Changes in Newly Diagnosed Patients with Obstructive Sleep Apnea

Sudhakar Tummala, PhD¹,\*; Jose Palomares, BS¹,\*; Daniel W. Kang, MD²; Bumhee Park, PhD¹; Mary A. Woo, RN, PhD³; Ronald M. Harper, PhD⁴,5; Rajesh Kumar, PhD¹,5,6,7

SLEEP, Vol. 39, No. 1, 2016





#### Aberrant/disrupted Functional Brain Network

## Aberrant Insular Functional Network Integrity in Patients with Obstructive Sleep Apnea

Bumhee Park, PhD¹; Jose A. Palomares, BS¹; Mary A. Woo, RN, PhD²; Daniel W. Kang, MD³; Paul M. Macey, PhD²⁴; Frisca L. Yan-Go, MD⁵; Ronald M. Harper, PhD⁴⁴; Rajesh Kumar, PhD¹⁴⁴,8

SLEEP, Vol. 39, No. 5, 2016

## Disrupted functional brain network organization in patients with obstructive sleep apnea

Bumhee Park<sup>1</sup>, Jose A. Palomares<sup>1</sup>, Mary A. Woo<sup>2</sup>, Daniel W. Kang<sup>3</sup>, Paul M. Macey<sup>2,4</sup>, Frisca L. Yan-Go<sup>5</sup>, Ronald M. Harper<sup>4,6</sup> & Rajesh Kumar<sup>1,4,7,8</sup>

Brain and Behavior, 2016; 6(3), e00441





#### Changes in Blood Brain Barrier

#### Water Exchange Across the Blood-Brain Barrier in Obstructive Sleep Apnea: An MRI Diffusion-Weighted Pseudo-Continuous Arterial Spin Labeling Study

Jose A. Palomares<sup>a,#</sup>, Sudhakar Tummala<sup>a,#</sup>, Danny J.J. Wang<sup>b,c</sup>, Bumhee Park<sup>a</sup>, Mary A. Woo<sup>d</sup>, Daniel W. Kang<sup>e</sup>, Keith S. St Lawrence<sup>f</sup>, Ronald M. Harper<sup>g,h</sup>, and Rajesh Kumar<sup>a,c,h,i,\*</sup>

J Neuroimaging. 2015 November; 25(6): 900-905.





## Fragmented Sleep enhances Postoperative Neuroinflammation

#### Fragmented Sleep Enhances Postoperative Neuroinflammation but Not Cognitive Dysfunction

Susana Vacas, MD, PhD,\* Vincent Degos, MD, PhD,† and Mervyn Maze, MB, ChB‡
ANESTHESIA & ANALGESIA

January 2017 • Volume 124 • Number 1





#### Outcomes





#### Impact of Untreated Obstructive Sleep Apnea

## The Impact of Untreated Obstructive Sleep Apnea on Cardiopulmonary Complications in General and Vascular Surgery: A Cohort Study

Zaid M. Abdelsattar, MD, MSc<sup>1</sup>; Samantha Hendren, MD, MPH<sup>1</sup>; Sandra L. Wong, MD, MS<sup>1</sup>; Darrell A. Campbell Jr, MD<sup>1</sup>; Satya Krishna Ramachandran, MD<sup>2</sup> SLEEP, Vol. 38, No. 8, 2015





#### Obesity Hypoventilation Syndrome

#### Postoperative Complications in Patients With Unrecognized Obesity Hypoventilation Syndrome Undergoing Elective Noncardiac Surgery



Roop Kaw, MD; Priyanka Bhateja, MD; Hugo Paz y Mar, MD; Adrian V. Hernandez, MD, PhD; Anuradha Ramaswamy, MD; Abhishek Deshpande, MD, PhD; and Loutfi S. Aboussouan, MD, FCCP

CHEST 2016; 149(1):84-91





#### Preoperative Sleep Disruption and Delirium

#### Preoperative Sleep Disruption and Postoperative Delirium

Jacqueline M. Leung, MD, MPH¹; Laura P. Sands, PhD²; Stacey Newman, BA¹; Gabriela Meckler, BS¹; Yimeng Xie, MS²; Caryl Gay, PhD³; Kathryn Lee, RN, PhD³

Journal of Clinical Sleep Medicine, Vol. 11, No. 8, 2015





#### Postoperative outcomes

# Does Obstructive Sleep Apnea Influence Perioperative Outcome? A Qualitative Systematic Review for the Society of Anesthesia and Sleep Medicine Task Force on Preoperative Preparation of Patients with Sleep-Disordered Breathing

Mathias Opperer, MD,\*† Crispiana Cozowicz, MD,\*† Dario Bugada, MD,‡ Babak Mokhlesi, MD, MSc,§ Roop Kaw, MD,|| Dennis Auckley, MD,¶ Frances Chung, MBBS, FRCPC,# and Stavros G. Memtsoudis, MD, PhD, FCCP\*†

ANESTHESIA & ANALGESIA

May 2016 • Volume 122 • Number 5





### Malpractice!





#### Legal literature

## Perioperative Complications in Obstructive Sleep Apnea Patients Undergoing Surgery: A Review of the Legal Literature

Nick Fouladpour, MD,\* Rajinish Jesudoss, MD,† Norman Bolden, MD,‡ Ziad Shaman, MD,† and Dennis Auckley, MD†

ANESTHESIA & ANALGESIA

January 2016 • Volume 122 • Number 1





### Screening





#### Validation of STOP-BANG questionnaire

Validation of the STOP-Bang Questionnaire as a Screening Tool for Obstructive Sleep Apnea among Different Populations: A Systematic Review and Meta-Analysis

Mahesh Nagappa<sup>1©</sup>, Pu Liao<sup>1©</sup>, Jean Wong<sup>1©</sup>, Dennis Auckley<sup>2‡</sup>, Satya Krishna Ramachandran<sup>3‡</sup>, Stavros Memtsoudis<sup>4‡</sup>, Babak Mokhlesi<sup>5‡</sup>, Frances Chung<sup>1©</sup>\* PLOS ONE | DOI:10.1371/journal.pone.0143697 December 14, 2015

Association of STOP-Bang Questionnaire as a Screening Tool for Sleep Apnea and Postoperative Complications: A Systematic Review and Bayesian Meta-analysis of Prospective and Retrospective Cohort Studies

Mahesh Nagappa, MD,\* Jayadeep Patra, PhD,† Jean Wong, FRCPC,† Yamini Subramani, MD,\* Mandeep Singh, FRCPC,† George Ho, BSc,† David T. Wong, FRCPC,† and Frances Chung, FRCPC†

ANESTHESIA & ANALGESIA

October 2017 • Volume 125 • Number 4

A Practical Approach to Screen for Obstructive Sleep Apnea

Frances Chung, MBBS; Hairil R. Abdullah, MBBS; and Pu Liao, MD

STOP-Bang Questionnaire

149#3 CHEST MARCH 2016





#### Interventions





#### CPAP in the Perioperative Setting Evidence of Support

Frances Chung, MBBS; Mahesh Nagappa, MD, DNB; Mandeep Singh, MD; and Babak Mokhlesi, MD CHEST 2016; 149(2):586-597

## Postoperative Oxygen Therapy in Patients With OSA

A Randomized Controlled Trial

Pu Liao, MD; Jean Wong, MD; Mandeep Singh, MBBS; David T. Wong, MD; Sazzadul Islam, MS; Maged Andrawes, MD; Colin M. Shapiro, MD; David P. White, MD; and Frances Chung, MBBS CHEST 2017; 151(3):597-611





#### Guidelines





#### Clinical Guidelines!

- 2003 American Academy of Sleep Medicine PMID: 14746392
- 2006 American Society of Anesthesiologists (ASA) PMID: 16645462
- 2012 Society for Ambulatory Anesthesia PMID: 22886843
- 2014 ASA Updated Report PMID: 24346178
- 2016





#### Respiration and Sleep Medicine

Section Editor: David Hillman

SPECIAL ARTICLE

## Society of Anesthesia and Sleep Medicine Guidelines on Preoperative Screening and Assessment of Adult Patients With Obstructive Sleep Apnea

Frances Chung, MBBS, FRCPC,\* Stavros G. Memtsoudis, MD, PhD,† Satya Krishna Ramachandran, MD,‡ Mahesh Nagappa, MD,§ Mathias Opperer, MD,|| Crispiana Cozowicz, MD,¶# Sara Patrawala, MD,\*\*†† David Lam, BSc,\* Anjana Kumar, BSc,‡ Girish P. Joshi, MD,‡‡ John Fleetham, MD,§§ Najib Ayas, MD,III Nancy Collop, MD,¶¶ Anthony G. Doufas, MD, PhD,## Matthias Eikermann, MD, PhD,\*\*\* Marina Englesakis, HBA, MLIS,††† Bhargavi Gali, MD,‡‡‡ Peter Gay, MD,§§§ Adrian V. Hernandez, MD, PhD, |||||| Roop Kaw, MD,¶¶¶ Eric J. Kezirian, MD, MPH, ### Atul Malhotra, MD,\*\*\*\* Babak Mokhlesi, MD,†††† Sairam Parthasarathy, MD,‡‡‡‡ Tracey Stierer, MD,§§§§ Frank Wappler, MD,|||||||¶¶¶¶¶ David R. Hillman, MD,#### and Dennis Auckley, MD\*\*\*\*\*





#### Metabolic and Bariatric Surgery

## Perioperative management of obstructive sleep apnea in bariatric surgery: a consensus guideline

Christel A.L. de Raaff M.D. <sup>a</sup>  $\stackrel{\triangle}{\sim}$  Marguerite A.W. Gorter-Stam M.D., Ph.D. <sup>b</sup>, Nico de Vries M.D., Ph.D. <sup>c, d, e</sup>, Ashish C Sinha M.D., Ph.D., D.A.B.A., M.B.A. <sup>f</sup>, H. Jaap Bonjer M.D., Ph.D., F.R.C.S.C., F.A.C.S. <sup>b</sup>, Frances Chung M.B.B.S., F.R.C.P.C. <sup>g</sup>, Usha K. Coblijn M.D. <sup>b</sup>, Albert Dahan M.D., Ph.D. <sup>h</sup>, Rick S. van den Helder M.D. <sup>i</sup>, Antonius A.J. Hilgevoord M.D., Ph.D. <sup>j</sup>, David R. Hillman M.B.B.S., F.A.N.Z.C.A. <sup>k</sup>, Michael P. Margarson M.B.B.S., M.D., F.R.C.A., F.F.I.C.M., D.I.P.L., I.C.M. <sup>l</sup>, Samer G. Mattar M.D., F.A.C.S., F.R.C.A., F.A.S.M.B.S. <sup>m</sup>, Jan P. Mulier M.D., Ph.D. <sup>n</sup>, Madeline J.L. Ravesloot M.D., Ph.D. <sup>e</sup>, Beata M.M. Reiber M.D. <sup>o</sup>, Anne-Sophie van Rijswijk M.D. <sup>p</sup>, Preet Mohinder Singh M.D. <sup>q</sup> ... Bart A. van Wagensveld M.D., Ph.D. <sup>a</sup>

#### Surgery for Obesity and Related Diseases

Volume 13, Issue 7, July 2017, Pages 1095-1109





#### **Pediatric**





#### OSA diagnosis in the pediatric population

### Reliability of Home Respiratory Polygraphy for the Diagnosis of Sleep Apnea in Children

María Luz Alonso-Álvarez, MD; Joaquín Terán-Santos, MD; Estrella Ordax Carbajo, MD, PhD; José Aurelio Cordero-Guevara, MD; Ana Isabel Navazo-Egūia, MD; Leila Kheirandish-Gozal, MD; and David Gozal, MD, FCCP CHEST 2015; 147(4):1020-1028

#### Nocturnal Oximetry-based Evaluation of Habitually Snoring Children.

Hornero R<sup>1</sup>, Kheirandish-Gozal L<sup>2</sup>, Gutiérrez-Tobal GC<sup>3</sup>, Philby MF<sup>4</sup>, Alonso-Álvarez ML<sup>5</sup>, Álvarez D<sup>6</sup>, Dayyat EA<sup>7</sup>, Xu Z<sup>8</sup>, Huang YS<sup>9</sup>, Tamae Kakazu M<sup>10</sup>, Li AM<sup>11</sup>, Van Eyck A<sup>12</sup>, Brockmann PE<sup>13</sup>, Ehsan Z<sup>14</sup>, Simakajornboon N<sup>15</sup>, Kaditis AG<sup>16</sup>, Vaquerizo-Villar F<sup>17</sup>, Crespo Sedano A<sup>18</sup>, Sans Capdevila O<sup>19</sup>, von Lukowicz M<sup>20</sup>, Terán-Santos J<sup>21</sup>, Del Campo F<sup>22</sup>, Poets CF<sup>23</sup>, Ferreira R<sup>24</sup>, Bertran K<sup>25</sup>, Zhang Y<sup>26</sup>, Schuen J<sup>27</sup>, Verhulst S<sup>28</sup>, Gozal D<sup>29</sup>.

Am J Respir Crit Care Med. 2017 Jul 31.

#### Diagnostic Capability of Biological Markers in Assessment of Obstructive Sleep Apnea: A Systematic Review and Meta-Analysis

Graziela De Luca Canto, DDS, MSc, PhD¹²; Camila Pachêco-Pereira, DDS²; Secil Aydinoz, MD³⁴; Paul W. Major, DDS, MSc, FRCD(C)²; Carlos Flores-Mir, DDS, DSc, FRCD(C)²; David Gozal, MD⁴

Journal of Clinical Sleep Medicine, Vol. 11, No. 1, 2015





#### Screening

Utility of screening questionnaire, obesity, neck circumference, and sleep polysomnography to predict sleep-disordered breathing in children and adolescents

Vidya T. Raman<sup>1,2</sup>, Mark Splaingard<sup>3</sup>, Dmitry Tumin<sup>1</sup>, Julie Rice<sup>1</sup>, Kris R. Jatana<sup>4</sup> & Joseph D. Tobias <sup>1,2</sup>

Pediatric Anesthesia 26 (2016) 655-664

Predictors of Perioperative Complications in Higher Risk
Children after Adenotonsillectomy for Obstructive Sleep Apnea:
A Prospective Study

Anchana Thongyam, MD<sup>1,2,3</sup>, Carole L. Marcus, MBBCh<sup>1</sup>, Justin L. Lockman, MD<sup>4</sup>, Mary Anne Cornaglia<sup>1</sup>, Aviva Caroff<sup>5</sup>, Paul R. Gallagher, MA<sup>6</sup>, Justine Shults, PhD<sup>6</sup>, Joel T. Traylor, RPSGT<sup>1</sup>, Mark D. Rizzi, MD<sup>5</sup>, and Lisa Elden, MD<sup>5</sup>

Otolaryngol Head Neck Surg. 2014 December; 151(6): 1046-1054.

The Use of Clinical Parameters to Predict
Obstructive Sleep Apnea Syndrome Severity in Children
The Childhood Adenotonsillectomy (CHAT) Study
Randomized Clinical Trial

Ron B. Mitchell, MD; Suzan Garetz, MD; Reneé H. Moore, PhD; Carol L. Rosen, MD; Carole L. Marcus, MBBCh; Eliot S. Katz, MD; Raanan Arens, MD; Ronald D. Chervin, MD, MS; Shalini Paruthi, MD; Raouf Amin, MD; Lisa Elden, MD; Susan S. Ellenberg, PhD; Susan Redline, MD

JAMA Otolaryngol Head Neck Surg. 2015;141(2):130-136.

The STBUR questionnaire for identifying children at risk for sleep-disordered breathing and postoperative opioid-related adverse events

Alan R. Tait<sup>1</sup>, Rebecca Bickham<sup>1,2</sup>, Louise M. O'Brien<sup>3,4,5</sup>, Megan Quinlan<sup>1,2</sup> & Terri Voepel-Lewis<sup>1</sup>

Pediatric Anesthesia 26 (2016) 759-766





## Impact of neurocognitive effects and potential long term effects on cardiovascular health trajectory

#### Effect of Sleep-disordered Breathing Severity on Cognitive Performance Measures in a Large Community Cohort of Young School-aged Children

Scott J. Hunter<sup>1,2</sup>, David Gozal<sup>1</sup>, Dale L. Smith<sup>3,4</sup>, Mona F. Philby<sup>1</sup>, Jaeson Kaylegian<sup>2</sup>, and Leila Kheirandish-Gozal<sup>1</sup> Am J Respir Crit Care Med Vol 194, lss 6, pp 739–747,

## Longitudinal Cardiovascular Outcomes of Sleep Disordered Breathing in Children: A Meta-Analysis and Systematic Review

Zarmina Ehsan, MD¹; Stacey L. Ishman, MD², Thomas R. Kimball, MD³; Nanhua Zhang, PhD⁴; Yuanshu Zou, PhD⁴; Raouf S. Amin, MD⁵ SLEEP, Vol. 40, No. 3, 2017





#### Association with asthma

#### Asthma outcomes after adenotonsillectomy: A systematic review

Nikita Kohli, MD <sup>a, \*</sup>, Dana DeCarlo, BA <sup>b</sup>, Nira A. Goldstein, MD <sup>a</sup>, Joshua Silverman, MD, PhD <sup>a</sup>

International Journal of Pediatric Otorhinolaryngology 90 (2016) 107-112





#### **OSA** treatment

Cochrane Corner: Extracts from The Cochrane Library: Tonsillectomy or Adenotonsillectomy versus Non-Surgical Management for Obstructive Sleep-Disordered Breathing in Children

Martin J. Burton, DM, FRCS<sup>1</sup>, Nira A. Goldstein, MD, MPH<sup>2</sup>, and Richard M. Rosenfeld MD, MPH<sup>2</sup>

#### Tonsillectomy for Obstructive Sleep-Disordered Breathing: A Meta-analysis

Sivakumar Chinnadurai, MD, MPH, Atia K. Jordan, MD, Nila A. Sathe, MA, MLIS, Christopher Fonnesbeck, PhD, Melissa L. McPheeters, PhD, MPH, David O, Francis, MD, MS

PEDIATRICS Volume 139, number 2





## Adenotonsillectomy to Treat Obstructive Sleep Apnea: Is It Enough?

A. Boudewyns, мр, Рър, <sup>1</sup>\* F. Abel, FRCPCH, мр, <sup>2</sup> E. Alexopoulos, мр, <sup>3</sup> M. Evangelisti, мр, <sup>4,5</sup> A. Kaditis, мр, <sup>6</sup> S. Miano, мр, <sup>7</sup> M.P. Villa, мр, Рър, <sup>4,5</sup> and S.L. Verhulst, мр, Рър, <sup>8</sup>

Pediatric Pulmonology 52:699-709 (2017)





#### Pediatric tonsillectomy is a resource-intensive procedure: a study of Canadian health administrative data

Kimmo T. T. Murto, MD, FRCPC O· Sherri L. Katz, MD, FRCPC · Daniel I. McIsaac, MD, MPH, FRCPC Matthew A. Bromwich, MD, FRCPC · Régis Vaillancourt, PharmD · Carl van Walraven, MD, FRCPC

Can J Anesth/J Can Anesth (2017) 64:724-735

Implementation of a perioperative surgical home protocol for pediatric patients presenting for adenoidectomy

Vidya T. Raman <sup>a, b, \*</sup>, Dmitry Tumin <sup>a</sup>, Joshua Uffman <sup>a, b</sup>, Arlyne K. Thung <sup>a, b</sup>, Candice Burrier <sup>a, b</sup>, Kris R. Jatana <sup>c</sup>, Charles Elmaraghy <sup>c</sup>, Joseph D. Tobias <sup>a, b</sup> International Journal of Pediatric Otorhinolaryngology 101 (2017) 215–222

#### Quality Measures for the Care of Pediatric Patients with Obstructive Sleep Apnea

Sanjeev V. Kothare, MD¹; Carol L. Rosen, MD²; Robin M. Lloyd, MD³; Shalini Paruthi, MD⁴; Sherene M. Thomas, PhD⁵; Matthew M. Troester. DO⁵; Kelly A. Carden. MD¹

Journal of Clinical Sleep Medicine, Vol. 11, No. 3, 2015

Guidelines to decrease unanticipated hospital admission following adenotonsillectomy in the pediatric population

Vidya T. Raman a,\*, Kris R. Jatana b, Charles A. Elmaraghy b, Joseph D. Tobias a International Journal of Pediatric Otorhinolaryngology 78 (2014) 19–22





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