

tions associated with OSA and patients with no risk. More recently, STOP-Bang has been used to identify patients with OSA in pre-anesthesia consultation, and we are concerned that the use of this score for this kind of screening may result in missing patients at risk and in unnecessary over-monitoring of patients without OSA.

Frank G. DETTE^{1*}, Juergen GRAF^{2,3},
Werner CASSEL³, Carla LLOYD-JONES²,
Stefan BOEHM⁴, Martin ZOREMBA²,
Patrick SCHRAMM¹, Gunther PESTEL¹,
Serge C. THAL¹

¹Department of Anesthesiology, University Medical Center of the Johannes Gutenberg University, Mainz, Germany; ²Department of Anesthesiology and Intensive Care, Philipps University, Marburg, Germany; ³Klinikum Stuttgart, Stuttgart, Germany; ⁴Department of Internal Medicine - Pneumology, Philipps University, Marburg, Germany

*Corresponding author: Frank Dette, Department of Anesthesiology, University Medical Center of the Johannes Gutenberg University, Langenbeckstrasse 1, 55131 Mainz, Germany.
E-mail: Frank.Dette@web.de

References

1. Sparkle T, Sridhar S, Corso RM, Castriotta R, Courtney S, Mullaly A, *et al.* Screening for sleep apnea in the perioperative setting: looking for the right compromise. *Minerva Anesthesiol* 2016;82:914-5.
2. Dette FG, Graf J, Cassel W, Lloyd-Jones C, Boehm S, Zoremba M, *et al.* Combination of STOP-Bang score with the Mallampati score fails to improve specificity in the prediction of sleep-disordered breathing. *Minerva Anesthesiol* 2016;82:625-34.
3. American Academy of Sleep Medicine. International Classification of Sleep Disorders. Third edition. Darien, IL: American Academy of Sleep Medicine; 2014.
4. Arzt M, Young T, Finn L, Skatrud JB, Bradley TD. Association of sleep-disordered breathing and the occurrence of stroke. *Am J Respir Crit Care Med* 2005;172:1447-51.
5. Hwang D, Shakir N, Limann B, Sison C, Kalra S, Shulman L, Souza Ade C, Greenberg H. Association of sleep-disordered breathing with postoperative complications. *Chest* 2008;133:1128-34.
6. Mokhlesi B, Hovda MD, Vekhter B, Arora VM, Chung F, Meltzer DO. Sleep-disordered breathing and postoperative outcomes after elective surgery: analysis of the nationwide inpatient sample. *Chest* 2013;144:903-14.
7. Sateia MJ. International classification of sleep disorders-third edition: highlights and modifications. *Chest* 2014;146:1387-94.
8. Berry RB, Gamaldo CE, Harding SM, Brooks R, Lloyd RM, Vaughn BV, *et al.* AASM Scoring Manual Version 2.2 Updates: New Chapters for Scoring Infant Sleep Staging and Home Sleep Apnea Testing. *J Clin Sleep Med* 2015;11:1253-4.
9. Chung F, Liao P, Elsaid H, Islam S, Shapiro CM, Sun Y. Oxygen desaturation index from nocturnal oximetry: a sensitive and specific tool to detect sleep-disordered breathing in surgical patients. *Anesth Analg* 2012;114:993-1000.

10. Cattano D, Sridhar S, Cai C, Mullaly A, Kainer L, Sparkle T, *et al.* Assessing risk of Obstructive Sleep Apnea by STOP-BANG questionnaire in an adult surgical population screened in the preoperative anesthesia clinic. *Minerva Anesthesiol* 2016;82:605-6.
11. Hiremath AS, Hillman DR, James AL, Noffsinger WJ, Platt PR, Singer SL. Relationship between difficult tracheal intubation and obstructive sleep apnoea. *Br J Anaesth* 1998;80:606-11.

Conflicts of interest.—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

Article first published online: April 13, 2016. - Manuscript accepted: April 12, 2016. - Manuscript received: March 21, 2016.

(Cite this article as: Dette FG, Graf J, Cassel W, Lloyd-Jones C, Boehm S, Zoremba M, *et al.* Low specificity needs to be considered when STOP-Bang or Mallampati score are used to identify patients at risk for sleep apnea. *Minerva Anesthesiol* 2016;82:915-6)

© 2016 EDIZIONI MINERVA MEDICA
Online version at <http://www.minervamedica.it>
Minerva Anesthesiol 2016;82(8):916-7

Where we are in training residents: results from a standardized evaluation approach

Dear Editor,

The European Diploma in Anaesthesiology and Intensive Care (EDAIC) is a multilingual, end-of-training, two-part examination covering the relevant basic sciences and clinical subjects appropriate for a specialist anaesthesiologist. It has been created by the European Society of Anaesthesiology (ESA) in 1984 to achieve a uniformly high standard of knowledge throughout Europe as judged by an independent Board of Examiners.¹ It is endorsed by the European Board of Anaesthesiology (EBA) of the European Union of Medical Specialties (UEMS)² and his achievement is mandatory to work as Anaesthesiologists in a number of European Country.

On-Line Assessment (OLA), has been introduced by ESA in 2011 to help anaesthesiologists to identify areas where their knowledge needs improving and up-dating in preparation of EDAIC.

On April 17, 2014 ten Italian Residency Training Schools involved their resident in Anesthesia and Intensive Care to participate to the OLA proposed by ESA.

One hundred twenty-six candidates attended obtaining an overall mean score of 61% for Section A (Basic Sciences) and 68% for Section B (Clinical Practice). These results were almost in line with the ones obtained

TABLE I.—Scores obtained by candidates in Paper A (basic sciences) and Paper B (clinical practice) and in the different areas constituting the exam.

Competency area	Total (N.=126) Mean±SD (%)	Stage of training			P value
		<2 years (N.=13) Mean± SD (%)	2-4 years (N.=65) Mean± SD (%)	>4 years (N.=48) Mean± SD (%)	
Paper A total	61±8	64±7	61±9	60±6	0.40
Paper B total	68±5	67±4	68±6	69±5	0.51
Cardiorespiratory physiology	62±11	65±6	64±12	60±10	0.07
General pharmacology	63±10	65±10	64±11	62±8	0.31
General physics	59±13	64±8	60±15	59±12	0.45
General physiology	63±11	65±13	64±13	61±8	0.41
Intensive care	65±8	66±9	66±10	65±6	0.83
Internal medicine	72±8	74±9	73±7	71±8	0.38
Local regional anesthesia	75±10	72±10	74±10	76±11	0.40
Emergency medicine	68±10	64±11	67±11	71±9	0.05
General anesthesia	67±7	65±3	67±7	68±8	0.34
Cardiovascular pharmacology	65±14	69±12	62±16	68±12	0.06
Central nervous system pharmacology	63±13	67±8	62±14	64±11	0.23
Clinical measurement	57±9	60±12	55±10	59±7	0.07
Neurophysiology	63±13	61±12	66±14	59±12	0.03
Special anesthesia and pain	68±7	67±5	67±8	68±6	0.64
Statistics	48±22	49±18	51±21	45±23	0.32

by the international cohort composed by 588 candidates coming from 58 centres located in 20 different Countries which obtained an overall mean score of 65 % for Section A and 70% for Section B.

But some differences come out if we take into account the level of seniority of the candidates (<2 years; 2-4 years; >4 years). While in the international cohort no change in the results obtained by the three levels of seniority was observed either in Section A (67%, 64% and 65%, respectively) or in Section B (70%, 70% and 70%, respectively), a progressive reduction in the Section A results (64%, 61% and 60%, respectively) and a progressive increase in the Section B results (67%, 68% and 69%, respectively) was observed in the Italian cohort.

A more detailed analysis of the results obtained by the Italian cohort in the different areas of competency composing the exam is reported in Table I.

As shown, it seems that the higher the seniority of the candidates, the lower the competency in Basic Science areas (*i.e.* physics, pharmacology, physiology) and the higher the competency in Clinical Practice areas (*i.e.* emergency medicine, general and regional anesthesia).

Although this observation is still preliminary and the sample size is still insufficient to provide statistically significant evidence, we believe it is, as of now, important to think back the training programs of the Italian Residency Training Schools to avoid that the basic competencies acquired during the Master Degree course, and apparently still present in the early years of attendance, are likely to be lost with the progress of clinical training.

Luca BRAZZI^{1, 2*}, Flavia PETRINI³,
Claudia FILIPPINI², Gabriele SALES²

¹Dipartimento di Anestesia e Terapia Intensiva, A.O.U. Città della Salute e della Scienza, Turin, Italy; ²Dipartimento di Scienze Chirurgiche, Università degli Studi di Torino, Turin, Italy; ³Dipartimento di Scienze Mediche, Orali e Biotecnologie, Università G.D'Annunzio, Chieti-Pescara, Italy

*Corresponding author: Luca Brazzi, Dipartimento di Anestesia e Terapia Intensiva, A.O.U. Città della Salute e della Scienza, Corso Dogliotti 14, 10126 Turin, Italy.
E-mail: luca.brazzi@unito.it

References

1. European Society of Anaesthesiology (ESA). European Diploma in Anaesthesiology and Intensive Care (EDA-IC) [Internet]. Available from <https://www.esahq.org/education/edaic/>; 2014 [cited 2016, Feb 16].
2. European Board of Anaesthesiology of the European Union of Medical Specialities (EBA UEMS). UEMS Anaesthesiology Section and Board [Internet]. Available from <http://www.eba-uems.eu/>; 2015 [cited 2016, Feb 16].

Conflicts of interest.—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

Article first published online: March 18, 2016. - Manuscript accepted: March 16, 2016. - Manuscript revised: March 1, 2016. - Manuscript received: November 20, 2015.

Group name.—Members of the OLA for Italy Team and co-authors of the present paper: Massimo Antonelli (Rome, Italy), Marinella Astuto (Catania, Italy), Michele Dambrosio (Foggia, Italy), Mario Dauri (Rome, Italy), Francesco Giunta (Pisa, Italy), Franco Marinangeli (L'Aquila, Italy), Paolo Pelosi (Genoa, Italy), Marco Ranieri (Rome, Italy).

(Cite this article as: Brazzi L, Petrini F, Filippini C, Sales G. Where we are in training of residents: results from a standardized evaluation approach. Minerva Anestesiologica 2016;82:916-7)