cAMP is a cyclic nucleotide that relays information from receptors to one or more effector proteins within a bacterial cell, functioning as a second messenger. To mediate a response, cAMP allosterically interacts with cAMP-binding proteins. Understanding how this happens is fundamental to predict how bacteria will adapt/act in a given context.

Methods: We recently showed that the human foodborne pathogen Listeria monocytogenes (Lm) produces cAMP. The aim of this study was thus to identify Lm proteins capable to bind cAMP. To do this, four candidate proteins selected by bioinformatics analyses were expressed, purified and studied biochemically. Three approaches were used: cAMP affinity chromatography; competitive cAMP affinity chromatography; and isothermal titration calorimetry (ITC).

Results: Among the four tested proteins, CbpA displayed cAMP-binding ability on the three approaches used.

Conclusion: Hence, our preliminary results showed that CbpA binds to cAMP. It is now mandatory to understand the relation between cAMP and CbpA, to determine the function of the protein itself and in complex with cAMP, and to understand the importance of this signalling system for virulence.

http://dx.doi.org/10.1016/j.pbj.2017.07.128

Public Health & Medical Informatics Poster Session Saturday, September 16th, 10h00

PS044

Assessment of ECG interpretation skills among Polish medical students, nursing, emergency medicine and English Division medical students

Marek Stopa∗, Harison Sevenanathan, Mateusz Bogusławski, Izabela Pałasz

Students Scientific Group of Interventional Cardiology at the 2nd Department of Cardiology and Cardiovascular Interventions

E-mail address: mkr.stopa@gmail.com (M. Stopa).

Aim: The aim of the study was to evaluate ECG interpretation skills among study population, and analyze factors determining their score.

Introduction: The electrocardiogram examination is one of the most frequently performed diagnostic tests. Correct interpretation of the ECG, particularly in life-threatening scenarios (LTS) may influence the decisions on appropriate actions and consequently have an impact on the lives and health of patients. It is important for medical, nursing and emergency medicine students to acquire this skill.

Methods: ECG interpretation skills were assessed by self-prepared questionnaire including questions about demographic data and 20 ECG problems with 17 cases. In 6 cases there were LTS. Three questions evaluated basic knowledge about rhythm, heart rate and axis. The survey was conducted via Internet. Study population consist of 551 medical, nursing and emergency medicine students.

Results: The overall score among Polish medical students is 46% which is higher than nursing and emergency medicine students (22% and 37% respectively; p < 0.001 in both). English division students scored almost similarly (49%; p = 0.27). Polish medical students scored better in LTS than the nursing students (37% vs 23%; p < 0.001). Among Polish medical students: Students in year “4–6” scored higher than those from year “1–3” (overall score: 51% vs 31%; p < 0.001, LTS: 41% vs 25%; p < 0.001). In addition, members...
of cardiology scientific groups scored higher than the rest (57% vs 43%; p < 0.001).

**Conclusion:** There is low level of ECG interpretation among medical students and quality of ECG training should be improved. Various factors influences ECG interpretation knowledge among students.

http://dx.doi.org/10.1016/j.pbj.2017.07.129

**PS126**

**Assessment of safe injection practice among nurses in Port Said General Hospital**

Karim Farag 1,2, Ahmed El-kiki 1, Ahmed Emam 1, Ahmed Mourad 1, Alaa Abdelrahman 1, Amira Fekry 1, Asmaa Elta 1, Asmaa Galal 1, Asmaa Ghanem 1, Eslam El-shourbagy 1,2, Esraa Hawas 1,2, Nermeen Gmal 1, Rawan Ghaly 1, Sara El-salous 1, Ayat Tawfik 1, B. Guimarães 1, Ahmed Emam 1, Ł. Reczek, M. Schonborn, S. Janiec, R. Santos

1 Students at Faculty of Medicine Port Said University, Egypt
2 Department of Public Health and Preventive Medicine Faculty of Medicine Port Said University, Egypt

**E-mail address:** king kemoo2010@yahoo.com (K. Farag).

**Aim:** Improving safe injection practice in Port-Said General Hospital.

**Introduction:** A safe injection is one that, “does not harm the recipient, does not expose the provider to any avoidable risk and does not result in waste that is dangerous for the community”. In developing countries, about 16 billion injections are administered each year.

**Methods:** Through-out March 2015, a cross-sectional, descriptive study was conducted to assess safe injection practice among 150 nurses in Port-Said General Hospital. Data collected by observational CDC Checklist and another checklist for unit evaluation.

**Results:** Regarding needle disposal 77% of nurses got rid of the needle in safety box, 1% threw it in the pin while 22% threw it in a barrel. Regarding hand washing 41% of nurses washed their hands before preparing medication, while 23% of nurses washed their hands before touching patients and 51% of them washed their hands after touching patients. 57% of nurses wore gloves while 43% didn’t. We found 52% of nurses didn’t have HBV vaccine. We found also 77% of nurses were trained on safe injection while 23% weren’t trained.

Regarding observation, 73% of medication areas were cleaned while 27% weren’t. 83% of nurses used single dose vials, ampoules or bottles of intravenous solution for only one patient while 17% didn’t. Regarding to hospital unites, only 44% of unites had written policies or procedures for safe injection.

**Conclusion:** Our evaluation results are good regarding clean medication area, needles for one patient, new needles and syringes, using single dose Vail and using medical connectors for one patient, while are poor regarding disinfecting rubber septum of vial, dating multi dose vials’ for 28 when opened and keeping multi dose vial in a centralized medication area and not to enter it in the immediate patient area, these poor results may be due to some untrained nurses.

http://dx.doi.org/10.1016/j.pbj.2017.07.130

**PS199**

**Frequency of analgesic drugs use and patients' awareness of their possible interactions with antiplatelet therapy in coronary heart disease**

I. Pałasz*, L. Reczek, M. Schonborn, S. Janiec, M. Cebenko

Students’ Scientific Group at the 1st Department of Cardiology, Interventional Electrocardiology and Hypertension, The Netherlands

**E-mail address:** isanula@gmail.com (I. Pałasz).

**Aim:** The aim of the study was to assess the prevalence and frequency of analgesic drug use in patients with coronary heart disease, as well as to assess patients knowledge about possible interactions of these drugs with conventional cardiac therapy.

**Introduction:** Nonsteroidal antiinflammatory drugs (NSAIDs) are commonly used in the management of pain in a variety of conditions. Available data clearly indicate that the NSAIDs use is associated with a number of adverse effects especially in patients with cardiovascular disease.

**Methods:** The study group consists 93 patients hospitalized in the tertiary cardiology center (mean age 67 ± 11 years, 30% females). Thirty nine subjects were hospitalized with diagnosis of acute coronary syndrome and 54 underwent elective coronary intervention. Self-prepared questionnaire was used to collect data.

**Results:** In the examined group 56 patients (60%) declared the use of analgesics drugs with regular use (defined as at least 3 times per week) reported by 25 subjects (27%). The most frequently used analgesics were NSAIDs (n = 37), paracetamol (n = 36), less commonly patients reported the use of tramadol (n = 6) or metamizol (n = 9). The majority of patients using analgesic are not aware about possible interactions with antplatelet therapy (the answer “yes” for the question about knowledge of possible interactions of analgesic with cardiac treatment gave only 21% of responders, while majority answered “do not know” (72%). Only 20% of patients admitted that they received the information about analgesics from their doctor. Majority of patients do not consult the use of analgesics with the physician (72%).

**Conclusion:** The regular use of NSAIDs/analgesic by 27% of hospitalized patients with coronary heart disease is a significant concern. Patients with coronary heart disease should be provided with detailed information and recommendation about safe analgesic therapy and alternatives for NSAIDs.

**Acknowledgements:** The authors thank Prof. Danuta Czarnacka, head of the 1st Department of Cardiology, Interventional Electrocardiology and Hypertension Collegium Medicum Jagiellonian University and Agnieszka Olszanecka Ph.D. for substantive supervision over the study.

http://dx.doi.org/10.1016/j.pbj.2017.07.131

**PS094**

**A new route for Medical Education: Rethinking Anatomy’s learning strategies**

S. Tsisar 1,*, J.M. Diniz 1, B. Viana 1, M. Sousa 1, B. Afonso 1, R. Santos 1, J.F. Silva 1, B. Guimarães 1,2

1 Department of Public Health, Forensic Sciences and Medical Education. Unit of Medical Education and Simulation. Faculty of Medicine, University of Porto, Porto, Portugal

1 www.elsevier.com