Background Community-acquired pneumonia is an infectious disease with a major impact on the population, being an important cause of mortality, morbidity and high-cost healthcare worldwide. The gravity of the infection is variable, but some strains can cause severe infections with increased mortality correlated with host-related factors. The treatment of the disease remains empiric, targeting the most likely pathogens commonly involved.

Purpose The study aimed to identify the most common pathogens involved in community-acquired pneumonia in our hospital, to determine the antibiotic-resistant strains and monitor the patient’s evolution in order to identify the main causes of possible treatment failure and increased mortality.

Materials and methods The 1 year study (2017) involved 170 patients hospitalised in the Clinical Emergency Hospital, Bucharest, Romania and diagnosed with community-acquired pneumonia. The study mainly focused on the initiated pharmacotherapy and the situation of prescribing antibiotics: active substances available in the hospital’s pharmacy, their associations and changes due to the bacterial resistance.

Results Most of the patients diagnosed with community-acquired pneumonia had cardiovascular and respiratory comorbidities. The patients received empiric treatment based on the clinical scenario, pathogens involved and also the available antibiotics. Our results showed a higher share of pneumonia among males (52%) rather than females (48%), the death rate having a similar pattern: 51% and 49%, respectively. In 35 cases, the antibiogram revealed the most common pathogenic bacteria that displayed resistance to the most commonly used antibiotics. The hospital pharmacist and the clinician involved in the study reported the use of only one active substance in 50% of the cases, two antibiotics, 31%, three antibiotics, 8% and more than four antibiotics (11%) were administered according to bacterial resistance. Ceferopazone was the most commonly prescribed antibiotic, followed by piperacillin and ceftriaxone.

Conclusions Community-acquired pneumonia is a disease treatable in the early stages if it is correctly diagnosed. E. coli, Pseudomonas spp, S. aureus, A. baumannii and Klebsiella spp. were the most incriminated etiological agents. Still, social-demographic and host-related factors played a critical role in the outcome of the disease and were correlated with some cases of a failed response to treatment and increased mortality.

REFERENCES AND/OR ACKNOWLEDGEMENTS

None.
Methods PI of the first semester of 2017 aimed at drugdosing recommendations for renal impairment or renal function recovery, were selected from the PI database. The information collected included drug identification and dosing recommendation made (dose reduction/increase/drug suspension). Age, weight, height and creatinine were added and GFR was calculated using the above two equations. Finally, we analysed the impact of the result on the dosing suggestion made, according to the GFR cut-off value for each drug-dosing recommendation.

Results A total of 149 interventions were included, covering 115 patients with a median age of 85 years. The recommendations for dosing alteration or drug suspension focused mainly on antibiotics (Meropenem, Piperacillin/tazobactam, Co-amoxiclav), anticoagulants (Enoxaparin, Rivaroxaban, Dabi-gatran) and NSAIDs. The mean difference in estimated GFR between the two formulae was 8 ml/min. However, larger differences appear to be associated with older age and body-weight limits. There were 36 (24%) cases of discrepancy between the recommendations to be made depending on the formula used.

Conclusions The choice of the GFR estimation formula may have a significant impact on the recommendations of dose adjustments, namely in the elderly and in extremes of body-weight. Because each formula has its limitations, it is crucial to interpret the result as a range of probability rather than an absolute value, and consider the complete patient context in the decision.

REFERENCES AND/OR ACKNOWLEDGEMENTS
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NP-006 EARLY DETECTION OF RETINOPATHY IN PREMATURE INFANTS USING MIXTURE OF EYE DROPS WITH 2.5% PHENYLEPHRINE HYDROCHLORIDE AND 0.5% TROPICAMIDE
B Alihodzic-Dilberovic, M Mandlo, O Zvizd. 1Clinical Centre of the University of Sarajevo, Clinical Pharmacy, Sarajevo, Bosnia–Herzegovina; 2Clinical Centre of the University of Sarajevo, Eye Disease Clinic, Sarajevo, Bosna–Herzegovina
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Background Retinopathy of prematurity (ROP) is an eye disease that can happen in premature babies. It causes abnormal blood vessels to grow in the retina and can lead to blindness. Birthweight and gestational age are the most important risk factors in the development of severe ROP. Phenylephrine and tropicamide are most commonly used as mydriatic agents for eye examination.

Purpose Using a combination of 2.5% phenylephrine hydrochloride and 0.5% tropicamide drops, in the Neonatal Intensive Care Unit (NICU), help us to discover abnormality in retinal vascularisation in the initial phase of retinopathy. This helps in effective medical treatment and healthy visual function.

Material and methods One-thousand, five-hundred and forty premature infants with a gestational age between 26 and 32 weeks and/or birthweight between 680 g and 2100 g were examined by binocular indirect ophthalmoscopy between 2 to 4 weeks after birth, and followed up until retinal vascularisation was complete. Pupillary dilatation was done with a mixture of 2.5% phenylephrine hydrochloride and 0.5% tropicamide and instilled twice at intervals 1 hour before examination. The eye drops were prepared in our clinical pharmacy. In order to identify the stage of premature retinopathy, and eye examination was repeated every 7 to 10 days. Depending on the results, the term of the next examination was determined every 7 to 14 days. Once the regression was achieved in two consecutive examinations, the monitoring was done once a month.

Results In this study, a total of 1540 premature infants were screened from 10 May 2017 to 16 May 2018. Maximal pupil dilatation was achieved with a mixture of 2.5% phenylephrine hydrochloride and 0.5% tropicamide. All examined infants had some type of ROP. Some children had spontaneous regression. Four infants had ROP that had to be treated with anti-VGF therapy within 24 to 72 hours.

Conclusion The early detection of ROP in premature and very-low-birthweight infants is crucial. Screening programmes for ROP should be implemented in every NICU and should be carried out by an experienced ophthalmologist and offered to all premature infants with birthweight of ≤2100 g or gestational age of ≤32 weeks to ensure early detection and timely treatment of threshold ROP to prevent its blinding sequelae.