ORAL PRESENTATION



Open Access

Antimicrobial resistance of germs isolated from invasive infections – Romania 2012

Gabriel Adrian Popescu^{1,2*}, Roxana Şerban³, Ionel Iosif³, Irina Codiță⁴, Olga Dorobăț², Daniela Tălăpan², Mariana Buzea⁵, Edit Szekely^{6,7}, Olivia Dorneanu⁸, Karina Bota⁹, Manuela Nica^{1,10}, Raluca Papageorghe¹¹, Camelia Ghiță¹², Irina Nistor¹³, Marina Indrared¹⁴, Adriana Pistol³, Alexandru Rafila^{1,2}

From The 9th Edition of the Scientific Days of the National Institute for Infectious Diseases Prof Dr Matei Bals Bucharest, Romania. 23-25 October 2013

Background

Antimicrobial resistance has become a serious threat to public health undermining the efficacy of existing antimicrobials (including the last-resort ones) while very few novel antimicrobial agents are in the development pipeline. The interventions aimed to contain antimicrobial resistance need a continuous surveillance of new mechanisms of resistance emergence and the spread of existing ones. Romania participated since 2002 as member of European Antimicrobial Resistance Surveillance Network (EARS) for invasive infection; it is a network which collects data for the most important bacteria and clinically relevant antibiotics. We analyzed the antimicrobial resistance results obtained in 2012 in Romania, in order to support national guidelines for antimicrobial treatment and chemoprophylaxis.

Methods

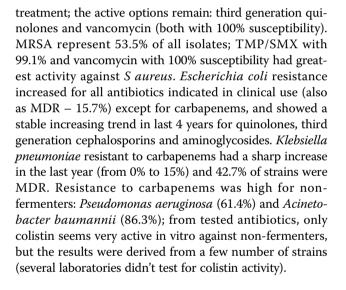
Antimicrobial resistance data collected for EARS-Net in 10 public hospitals in Romania in 2012 (756 strains) were analyzed; the resulting levels of resistance were compared with the results from the previous year as presented in EARS-Net 2011 report.

Results

The number of isolates was 2.55 folds greater than in 2011. Resistance of enterococci to vancomycin is negligible, together with *Enterococcus faecalis* resistance to ampicillin. *S pneumoniae* non-susceptibility to penicillin (38.6%), resistance to macrolides (39.5%) and dual (32.5%) compromise these alternatives for invasive infection

* Correspondence: gabrielp9@yahoo.com

¹Carol Davila University of Medicine and Pharmacy, Bucharest, Romania Full list of author information is available at the end of the article



Conclusion

The antimicrobial resistance in 2012 reached great levels for many antibiotics. There is an urgent need for a national program and local interventions to stimulate the rational use of antibiotics.

Authors' details

¹Carol Davila University of Medicine and Pharmacy, Bucharest, Romania.
²National Institute for Infectious Diseases "Prof. Dr. Matei Balş", Bucharest, Romania.
³National Institute of Public Health, Bucharest, Romania.
⁴Cantacuzino National Institute for Research and Development for Microbiology and Immunology, Bucharest, Romania. ⁵Elias University Emergency Hospital, Bucharest, Romania. ⁶Tirgu Mureş Emergency County Clinic Hospital, Romania. ⁷University of Medicine and Pharmacy Tirgu Mureş, Romania. ⁸Infectious Diseases Hospital "Sf Parascheva", Iaşi, Romania.
⁹Dr. Victor Babeş Clinical Hospital of Infectious and Tropical Diseases "Dr. Victor Babeş", Bucharest, Romania. ¹¹Colţea Clinical Hospital, Bucharest, Romania.
¹²Churdeni Clinical Institute, Bucharest, Romania. ¹³Grigore Alexandrescu



© 2013 Popescu et al; licensee BioMed Central Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Clinical Children's Emergency Hospital, Bucharest, Romania. ¹⁴Bacău County Hospital, Romania.

Published: 16 December 2013

doi:10.1186/1471-2334-13-S1-O16 Cite this article as: Popescu *et al.*: Antimicrobial resistance of germs isolated from invasive infections – Romania 2012. *BMC Infectious Diseases* 2013 13(Suppl 1):O16.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

BioMed Central

Submit your manuscript at www.biomedcentral.com/submit