tract infection were also present in sewage sludge. Consistently, strains from both sources were assigned together into the same phenotypical clusters.

P1260 Paediatric faecal colonization with extended-spectrum β-lactamase producing Enterobacteriaceae in northern Portugal

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Objectives: Our previous work, in faecal colonization in the community, alerted us for the finding of extended-spectrum β-lactamase (ESBL) producers in particular niches, as nursing homes. In some Portuguese social solidarity institutions, we can find a day care centre (DCC) adjacent to a nursing home facility. In that way, the aim of our study was the detection and characterization of ESBL producing Enterobacteriaceae in the faecal flora of children attending DCC, in Northern Portugal.
Methods: Faecal samples of children from few months to 6 years old, attending two DCC, from the North of Portugal, were collected from April to July 2009. Samples were suspended in BHI. Isolates were selected in MacConkey agar with ceftazidime (2 mg/L), cefotaxime (2 mg/L), and aztreonam (2 mg/L). Lactose fermenters were randomly selected and susceptibility to antimicrobial agents was determined by agar diffusion methods. Screening of ESBL producers was performed by the double disk synergy test and confirmed according to the CLSI. Identification of the selected strains was achieved by API 20 E. β-lactamases were characterized by isoelectric focusing. Conjugation assays were performed with *Escherichia coli* HB101.
Results: Of 105 faecal samples of children attending two day care centres in the North of Portugal we screened 32 ESBL producing Enterobacteriaceae isolates: 18 *Escherichia coli*, 2 *Citrobacter freundii*, 3 *Enterobacter cloacae*, 1 *Enterobacter aerogenes*, 2 *Enterobacter* sakazaki, 2 *Klebsiella* ornithinolytica, 2 *Hafnia alvei*, 1 Pantoea spp. and 1 *Klebsiella oxytoca*, predominantly showing an ESBL of pI > 8 alone or in association with β-lactamases of pIs 5.4, 7.4 and 7.8. Other ESBLs of pI approximately 8 and 7.6, were also present in some isolates. ESBL gene was successfully transferred coding a β-lactamase of pI > 8 and 5.4 plus approximately 8.
Conclusion: Our results showed that young children are colonized with ESBL producing Enterobacteriaceae. Isoelectric points of predominant β-lactamases, alert for the hypothesis of one successful track of community dispersion of a putative CTX-M-15, in this young population, in different combination with other β-lactamases, as in the CTX-M-15 producing ST131 *Escherichia coli* epidemic clone. The hypothesis of spread from the neighbour nursing homes to the young population needs to be assessed by strain relationship determination. This reality might create a cycle of dispersal of ESBL producers, to the healthy community.

β-lactam activity against Enterobacteriaceae

P1261 Comparative *in vitro* activity of cefditoren and other antimicrobials against Enterobacteriaceae causing community-acquired uncomplicated urinary tract infections in women: a Spanish nationwide multicentre study

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Objectives: Cefditoren is a third generation orally administered cephalosporin with a broad spectrum of activity against Gram-positive and Gram-negative bacterial species. After an oral 400-mg single dose, the mean concentrations in urine are 186.5 mg/L at 2–4 h, and 12.7 mg/L at 8–12 h, and is a potential drug to be used in the treatment of urinary tract infection (UTI). We performed a multicenter nationwide study in Spain in order to determine the *in vitro* activity of cefditoren and other comparative agents against Enterobacteriaceae causing community-acquired uncomplicated UTI in women.
Methods: From June 2008 to March 2009, 89 institutions participated in the study. A total of 2152 Enterobacteriaceae were collected and sent to a reference laboratory where identification and antimicrobial susceptibility testing was performed against 20 antimicrobials using and automated microdilution method (MicroScan). Cefditoren MIC's were determined by the broth microdilution method (CLSI guidelines) using the same inoculum.
Results: Microorganisms isolated were *E. coli* (81.8%), *Klebsiella pneumoniae* (7.9%), *Proteus mirabilis* (5.2%), and others (5.1%). A total of 51 isolates (2.4%) were extended-spectrum β-lactamase (ESBL) producers, 3 (0.1%) produced plasmidic AmpC enzymes, and 64 (2.9%) chromosomal AmpC. The MIC50/MIC90 (mg/L) of cefditoren against all isolates was 0.12/0.5. Cefditoren inhibited 96.5% of isolates at 1 mg/L, and was uniformly active against all isolates with the exception of strains producing ESBLs or AmpC enzymes. The MIC50/MIC90 of other antimicrobials were: ampicillin (AMP) >16/>16; amoxicillin/clavulanic (A/C) ⩽8/4/16/8; cefuroxime (FUR) ⩽4/8; cefotaxime (CTX) ⩽1/⩽1; ciprofloxacin (CIP) ⩽0.12/>2; cotrimoxazole (SXT) ⩽2/38/>4/76; and fosfomycin (FOS) ⩽16/⩽16. The respective percentages of resistance were: 61%, 17.2%, 5.5%, 2.3%, 20.2%, 27.4%, and 4.8%.
Conclusions: The activity of cefditoren against Enterobacteriaceae producing community-acquired uncomplicated UTI in women was superior to that of AMP, A/C, FUR, CIP, SXT, and similar to that of FOS.

P1262 Susceptibility of Gram-negative pathogens isolated from intra-abdominal infections in Europe in 2008–2009 – The SMART Study

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Objectives: The Study for Monitoring Antimicrobial Resistance Trends (SMART) program has been monitoring activity of ertapenem (Etp), amikacin (Ak), cefepime (Cpe), cefoxitin (Cfx), ceftazidime (Caz), ceftriaxone (Cax), ciprofloxacin (Cp), imipenem (Imp), levofloxacin (Lvx), ampicillin-sulbactam (AS), and piperacillin/tazobactam (PT) vs. Gram-negative bacteria from intra-abdominal infections (IAI) since 2002. This report summarizes susceptibility levels for key IAI pathogens in Europe during 2008–2009.
Methods: 31 labs in Europe each collected up to 100 consecutive Gram-negative bacteria/year from IAI in 2008–2009. MICs were determined by broth microdilution, and interpreted using EUCAST guidelines if available. Susceptibility rates were determined for species with ⩾10 isolates.
Results: 3209 isolates were collected; however, only those with N⩾10 (3130, 97.5% of the total) were included in this analysis. The remaining 79 isolates represented 35 species. The table below shows % susceptible for each drug; values ⩾90% are shaded.
Conclusions: *E. coli* (~50% of all IAI pathogens) was ⩾90% susceptible vs. only 3 drugs: Imp, Etp, and Ak. *K. pneumoniae* (~11% of all IAI pathogens) was ⩾90% susceptible vs. only 2 drugs (Imp and Etp), and just 1 other (Ak) was >80%. No drug achieved even 80% susceptible vs. *P. aeruginosa*. Until definitive identification and susceptibility testing results are known, options for effective empirical therapy of IAI in Europe have diminished to include very few (e.g., carbapenems, amikacin) of the agents evaluated in this study.

Organism	N	Imp	Etp	Ak	Cpe	PT	Cax	Cfx	Caz	Lvx	Cp	AS
Escherichia coli	1563	100	99	92	87	87	85	85	85	76	75	44
Klebsiella pneumoniae	359	92	90	87	75	71	73	74	73	76	71	53
Pseudomonas aeruginosa	280	70	na	76	75	77	na	na	79	70	72	na
Enterobacter cloacae	211	99	85	96	77	67	56	56	58	91	87	22
Klebsiella oxytoca	136	99	100	100	94	89	91	94	99	99	96	71
Proteus mirabilis	131	83	100	97	100	99	82	61	63	88	81	1
Acinetobacter baumannii	93	47	na	54	na	na	na	na	na	16	16	na
Citrobacter freundii	79	100	100	97	87	78	69	69	68	99	97	50
Morganella morganii	72	83	100	97	100	99	82	61	63	88	81	1
Enterobacter aerogenes	56	93	88	96	84	61	52	54	48	93	93	25
Proteus vulgaris	37	89	100	97	92	97	51	78	84	97	97	54
Serratia marcescens	31	97	97	94	94	84	77	87	97	97	77	19
Stenotrophomonas maltophilia	29	10	7	14	10	10	10	10	38	86	14	na
Citrobacter koseri	21	100	100	100	95	100	95	95	95	95	95	90
Hafnia alvei	21	100	85	95	76	43	33	43	24	100	100	10
Citrobacter braakii	11	100	100	100	91	82	64	64	64	100	100	64