Emergence of an *Haemophilus parainfluenzae* Isolate with Decreased Susceptibility to Cefotaxime plus Fluoroquinolones.

Diego Faccone (1), Paula Lopez Ruitti (1), Miryam Vazquez (2), Leonor Guerriero (1), Celeste Lucero (1), Paula Gagetti (1), Paola Ceriana (1) and **Alejandra Corso** (1).

(1) Antimicrobianos, Instituto Nacional de Enfermedades Infecciosas Dr. Malbran; (2) Hospital de Niños Gutierrez, Buenos Aires, Argentina.

Background. *H. parainfluenzae* (Hpa) is commonly associated with respiratory and genitourinary tract infections. Decreased susceptibility (DS) or resistance to ampicillin is mediated by TEM ß-lactamase and/or mutations in PBP3 (*ftsI* gen). To date, DS to cefotaxime was described only in *H. influenzae* isolates from Japon and Spain and was associated with PBP3 mutations. The first fluoroquinolone-resistant Hpa was recently reported in Spain.
Aim. To describe the first Hpa isolate with DS to both cefotaxime and fluoroquinolones.
Methods. Hpa M11065 was recovered from a 2-year-old cystic fibrosis patient. Disc diffusion and MIC were evaluated according to CLSI guidelines. ß-lactamase activity was evaluated by nitrocefin. PCR and DNA sequencing of bla_{TEM}, *fst*I and quinolone-resistance determining region (QRDR) of *gyr*A and *par*C genes were performed. Ciprofloxacin MIC was evaluated with and without 12.5 mg/L of reserpine.
Results. Hpa M11065 was ß-lactamase positive and presented BLPACR phenotype (β-lactamase positive amoxicillin clavulanate resistant) with MIC (mg/L) of: ampicillin (256); amoxicillin-clavulanate (8), cefuroxime (8), cefotaxime (4), trimethoprim-sulfamethoxazole (0.06) and chloramphenicol (0.5). The isolate harboured *bla*TEM-1 and mutations in PBP3: Asn526Lys, Ser385Thr, Val511Ala, Ile519Val and Asp551Leu. M11065 showed no halo with nalidixic acid disc and a ciprofloxacin MIC of 0.5 mg/L. Substitutions in QRDR of both *gyr*A: Ser84Tyr and *par*C: Ser84Phe genes were detected. Addition of reserpine did not reduce the MIC of ciprofloxacin, discarding the contribution of efflux pumps.
Conclusions. To our knowledge this is the first description of Hpa showing DS to cefotaxime associated to PBP3 mutations and DS to fluoroquinolones due to QRDR mutations.