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Abstract (publication only)

**Prevalence and sensitivity of viral and bacterial enteropathogens in a local hospital in Spain (2004-2010)**

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**Objectives:** The aim of this study was to establish the prevalence and sensitivity of isolated bacterial and viral enteric pathogens in the Health Care Area of Manzanares (Ciudad Real, Spain) from 2004 to 2010. **Materials and Methods:** We studied all stool samples received from patients with suspected gastroenteritis and were processed for *Salmonella* spp., *Shigella* spp., *Yersinia* spp., *Aeromonas* spp. and *Campylobacter* spp. Suspected cases of *Campylobacter* spp. were identified using API Campy® (bioMérieux, France). In other cases, identification and susceptibility testing were carried out in the WIDER® automated system (Soria Melguizo, Spain). We used specific antisera (Bio-Rad, Spain) for the serotyping of *Salmonella* spp. All samples from patients younger than 5 years were tested for viral pathogens (Rotavirus and Adenovirus species) by immunocromatographic methods (Rota/Adenoscreen® Dipstick, Microgen Bioproducts, UK). **Results:** We isolated 764 bacterial pathogens from 3287 stool samples (23.2%). We observed 437 (21%) positive samples to Rotavirus and 96 (5%) to Adenovirus from 2069 and 1870 stool samples analyzed respectively. From bacterial pathogens, 326 isolates were *Salmonella* spp. (42.7%), 297 *Campylobacter* spp. (38.9%), 101 *Aeromonas* spp. (13.2%), 28 *Yersinia enterocolitica* (3.7%), 11 *Shigella* spp. (1.4%) and 10 *Vibrio* spp. (1.3%). The most prevalent *Salmonella* spp. serogroups were B (43.6%) and D (41.7%). *Campylobacter jejuni* was identified in the majority of *Campylobacter* spp. cultures. We found 73 bacterial mixed infections, 71 double and 2 triple and 67 (91.8%) occurred in children under 12 years. The sensitivity percentage of *Salmonella* spp. to nalidixic acid and ciprofloxacin was 61.9% and 91.9%. In *Salmonella* spp. serogroup B, the sensitivity to amoxicillin and nalidixic acid was 34.4% and 92.6% and in serogroup D of 72.6% and 52.2% respectively. We isolated three ESBL producing *Salmonella* spp. As for *Campylobacter* spp. 98.2% of isolates were sensitive to erythromycin and 12.2% to ciprofloxacin. **Conclusions:** 1. The most prevalent enteropathogens in our area were Rotavirus, *Salmonella* spp. and *Campylobacter* spp. among the investigated pathogens. 2. *Salmonella* spp., *Aeromonas* spp. and *Y. enterocolitica* had high sensitivity to ciprofloxacin and 3rd generation cephalosporins. 3. The frequency of bacterial mixed infections was high in our Area, and were more common in children. 4. Rotavirus infection was more prevalent than Adenovirus infection.