

## A Multidrug- Resistance Pattern of an *Escherichia coli* Strain Isolated from Diarrheal Stools at the China-Guinea Friendship Hospital of Kipe in Conakry

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### ABSTRACT

**Introduction:** Diarrheal infections associated to multidrug resistant bacteria are a public health problem, particularly in the tropics.

**Objective:** The aim of this study was to describe a Multidrug resistant strain of *Escherichia coli* (*E. coli*) isolated from diarrheal stools.

**Patients and Methods:** A sample of diarrheal stools from a 30 years old housekeeper patient was analyzed at China Guinea Friendship Hospital of Kipé/Conakry. Parasitological examination by optical microscopy, followed by bacteriological analysis were done. Cultures were carried out on different agar media. Bacterial identification, antibiograms and minimum inhibitory concentrations (MIC) were performed using the Vitek 2 System.

**Results:** The isolated *E. coli* strain was sensitive only to 4 of 29 antibiotics tested including imipenem, ertapenem, amikacin and nitrofurantoin. Intermediate sensitivity was detected towards minocycline. In contrast, this strain was resistant to piperacillin, cefuroxime, cefuroxime axetil, cefixime, ceftriaxone, cefepime, aztreonam, meropenem, levofloxacin, ofloxacin, tetracycline, tigecycline, chloramphenicol, trimethoprim, ampicillin, amoxicillin/clavulanic acid, ticarcillin, piperacillin/tazobactam, cephalothin, cefotaxime, ceftazidime, gentamicin, tobramycin, nalidixic acid, ciprofloxacin, ofloxacin and trimethoprim/sulfamethoxazole with high MICs.

**Conclusion:** The treatment of this multidrug-resistant *Escherichia coli* diarrheal infection requires appropriate antibiotic therapy, based on the results of an accurate antibiogram to be performed with rapid means for better patient care.

**Keywords:** *Escherichia coli*, Diarrheal stools, Multidrug-resistance, Antibiotics, Kipe/Conakry

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