

## First invasive isolate of *Neisseria meningitidis* (Nme) showing decreased susceptibility to ciprofloxacin (DSC) in Argentina (ARG)

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To date, only three Nme with DSC has been reported worldwide: in France (1999), Australia (2000) and Spain (2003). The resistance mechanisms involved mutations in the QRDR of *gyrA*, Asp95→ Gly or Asn or Thr91→Ile. In 2002, the Nme 5191 was isolated from CSF from a 63 years–old female with meningitis, in the HAC, Rio Negro. The strain was submitted to the National Reference Laboratory (INEI) to determine the serogroup and the susceptibility profile as part of the Programme of surveillance of Nme isolates from invasive disease. Nme 5191 showed DSC. **Aim:** To characterize the first Nme with DSC in ARG. **M&M:** Serogroup and serotype/serosubtype were determined by slide agglutination and ELISA, respectively. MICs were performed by agar dilution method according to NCCLS. MICs to nalidixic acid (NAL) and ciprofloxacin (CIP) were assessed with and without 6.25 mg/L of reserpin, an inhibitor of several types of efflux pumps. Nme EMGM-2, -10 and -13, were used as CIP susceptible control strains. Amplification and sequencing of QRDR of *gyrA* and *parC* genes were performed by standard methods. **Results:** Nme 5191 was characterized as Y:NT:P1.5. The strain was susceptible to (MIC mg/L): penicillin (0.03), ampicillin (0.06), ceftriaxone (0.001), rifampicin (0.008), chloramphenicol (0.5) and tetracycline (0.12), but displayed DSC (0.12) and NAL resistance (64). QRDR of *gyrA* and *parC* genes did not show mutations as compared to the QRDR of susceptible meningococcal strains. The addition of reserpin reduced the MICs of CIP and NAL to 0.004 and 0.5 mg/L, respectively, but the MICs of Nme control strains remained unchanged. **Conclusion:** This is the first Nme with DSC described in ARG and the fourth worldwide. The absence of mutations in QRDR of *gyrA* or *parC* genes and the reserpin-dependent reduction in the MICs of CIP and NAL suggest the presence of an efflux mechanism