Adherence to New Treatment Guidelines for Uncomplicated Anogenital and Pharyngeal Neisseria Gonorrhoea Cases in Adults in Alberta, Canada

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BACKGROUND

- The emergence of reduced susceptibility of N. gonorrhoeae (NG) to ceftriaxone and azithromycin has required the global revision of treatment guidelines.
- In Alberta, Canada in February 2012, guidelines for preferred treatment of NG were changed from monotherapy with cefixime 400 mg orally or ceftriaxone 125 mg IM to dual therapy with cefixime 800 mg orally or ceftriaxone 250 mg IM plus azithromycin 1g. (Table A).
- We examined the adherence to new treatment guidelines introduced in 2012 in Alberta, Canada.

INTERVENTION

- February 2012, a letter was sent to all physicians informing them of change in NG treatment.
- February 2013, printed STI treatment guidelines were sent to all physicians.
- All NG cases are followed by Public Health to ensure adequate treatment.

METHODS

- Treatment data for provincial NG cases diagnosed between 2010 and 2013 was reviewed.
- Three time periods were created: pre-guideline change, 1st year post-guideline change, and 2nd year post-guideline change.
- Treatment data was coded as adhering to preferred or alternate guidelines if the case received medication meeting guideline recommendations at that time.
- Categorical variables were compared using the Chi-Square or Fisher’s exact test and continuous variables were compared using the Mann-Whitney test.
- Ethics approval was obtained from the University of Alberta Health Research Ethics Boards.

RESULTS

- A total of 6,685 NG cases were diagnosed; 4% (n=267) of cases had no treatment data available.
- 40% (n=2,653) of cases were treated prior to the guideline change, 31.8% (n=2,038) during the 1st year of change, and 26.9% (n=1,727) cases were treated in the 2nd post-change period.
- Overall, 89.3% (n=2,367) of cases were treated according to guidelines than cases post-change (Figure A).
- Cases treated by a provincial STI Clinic were more likely to be treated according to guidelines than cases treated by other healthcare providers throughout all time periods (p<0.001, Figure B) and all patient groups (MSM/Throat: STI Clinics 97.3% and Other HCP 87.5%, p=0.01, Heterosexual: STI Clinics 97.2% and Other HCP 79.4%, p=0.001).
- In the 2nd year post guideline change, the most common scenarios in which guidelines were not met included the use of cefixime 400 mg orally (38.7%; n=95) or cefixime 800 mg/ceftriaxone 250 mg monotherapy (22.6%, n=54). In addition, 13.9% (n=26) of cases were treated solely for chlamydia and 3.8% (n=7) of cases received a treatment regime containing ciprofloxacin (Table B).
- Alberta NG resistance (2010-2013) to cefixime/ceftriaxone= 0%; azithromycin = 2.1%; ciprofloxacin=20.5%

CONCLUSIONS

- After an initial drop in the percentage of adequately treated NG cases, adherence to new treatment guidelines was high among Alberta’s health care providers by the 2nd year post guideline change.
- STI Clinics returned to baseline rates within 6 months of guideline changes, however other health care providers have not yet returned to the previous baseline.
- 83.3% (199) of the non-compliant treatment regimes were correct based on the previous guidelines.
- Cases diagnosed by other health care providers continue to benefit from the close public health follow up and education provided by partner notification nurses.