

P0466 Comparison of incidence of adverse tendon events between fluoroquinolone and ceftriaxone/azithromycin recipients among hospitalised community-acquired pneumonia patients from 2011-2016

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Background: Fluoroquinolones (FQs) are frequently used in patients with community acquired bacterial pneumonia (CABP). Recent product labeling changes have listed tendinopathy/tendon rupture for FQs. These changes were made in the absence of controlled studies involving patients using other antibiotics for similar indications. The objectives of this study were to compare the incidence of adverse tendon events (TE) between FQ and ceftriaxone/azithromycin (CTX-AZM) among pts with CAP and determine if FQ treatment is independently associated with TE.

Materials/methods: A retrospective cohort study was conducted among patients in the Upstate New York Veterans' Healthcare Administration. Inclusion criteria: (1) age ≥ 18 years; (2) diagnosis of CAP from 1/2011 to 12/2016; (3) hospitalized; and (4) received FQ or CTX/AZM on hospital day 1 for ≥ 24 hours. A natural word search algorithm was applied to identify TE in patients' clinical progress notes 90 days post-initiation of FQ or CTX-AZM therapy. Word search terms included: tendinopathy, tendon pain, tendon rupture, tendinitis, and Achilles heel pain/tear/torn/rupture. Two adjudicators manually assessed terms to ensure they were used in the appropriate context.

Results: There were 1038 FQ and 1056 CTX-AZM patients in the study period. Moxifloxacin (55.6%) was the most frequently used FQ, followed by levofloxacin (36.7%) and ciprofloxacin (7.7%). Most demographic, comorbidities and baseline features were similar between FQ and CTX/AZM recipients. The incidence of TE did not differ significantly between groups (FQ: 18/1038 [1.7%] vs CTX-AZM: 10/1056 [0.9%], $p=0.12$). In multivariate analyses, FQ treatment was not associated with TE (hazard ratio: 1.31, 95% confidence interval: 0.57-3.05, $p=0.53$) after adjustment for age, weight ≥ 100 kg, and ICU residence.

Conclusions: Use of FQs was not associated with TE in hospitalized CAP patients. These findings should be validated in a larger study to minimize the chance of a type II error.