

P0879 Antimicrobial stewardship focused on treatment durations: which clinical impact ?

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Background: Shortening duration of antibiotic therapy is one of the major goal of antimicrobial stewardship (AS) programs. Most infectious diseases require a 7-day treatment course. We aimed to evaluate the clinical impact (efficacy and safety) of a systematic control of antibiotic treatments longer than 7 days.

Materials/methods: From June 2016 to May 2017, an organization for antibiotic duration review by an AS team composed with an IDP and a pharmacist allowed to detect all curative prescriptions lasting longer than 7 days. For every antibiotic prescriptions reaching day 7, a bedside visit by the AS team was performed. Data concerning patients, site of infection, antimicrobial(s) prescribed and their planned duration were collected. Planned durations were reevaluated and led to an assertion or to a shortening of the planned duration, taking into account the clinical situation, guidelines and available data on antibiotic therapy durations. For each patient, a follow up was performed until at least 15 days after completion of antibiotic treatment or hospital discharge, to assess its efficacy and safety.

Results: Overall, 188 antibiotic treatments lasting longer than 7 days were collected. Reasons for antibiotic treatment were mostly bone and joint infections (n=44), urinary tract infections (UTI) (n=34), respiratory tract infections (RTI) (n=26), skin and soft tissue infections (n=23), intraabdominal infections (n=20) and infective endocarditis (n=13). The IDP considered planned duration appropriate in 141 cases (75%), whereas 47 (25%) could be shortened: 20 of them (43%) concerned UTI and 12 (26%) concerned RTI. Prescribers accepted IDP's shortening proposal in 41/47 cases (87% acceptance). Finally more than 300 days of antibiotic treatment were saved. For the 41 patients with shortened duration (median 8 days), outcome was favourable in 31 cases (76%). Regarding adverse drug reactions, none was observed for those with shortened duration.

Conclusions: A systematic alert to AS team after 7 days of antibiotic therapy led to a reduction of antibiotic use without compromising outcome of patients and suppressed adverse events.