emergency department visits in 1999–2001 by individuals aged 25–64 with primary diagnosis of pneumonia, antibiotic prescription within three-days, chest x-ray on index date, continuous enrollment for 12-months prior, 30-days after index visit. Exclusion criteria: antibiotic prescription, pneumonia diagnosis, or hospitalization in prior 30-days; initial therapy with multiple antibiotics; in prior 12-months residence in a long-term care facility or diagnosis of cancer of bronchus or lung, secondary malignancy, HIV/AIDS, cystic fibrosis, immunity disorders. We considered the following comorbid illnesses: chronic liver, renal or lung disease; cerebrovascular disease; cardiac disease; diabetes mellitus; malignancy. RESULTS: A total of 5748 cases met criteria, 13.9% initially seen in the emergency department. Of these, 16.8% had one comorbidity, 3.5% had multiple comorbidities. Macrolides were the most common initial therapy (66.5%), followed by quinolones (17.9%). Quinolone use more than doubled from 1999 to 2001, from 11.8% to 24.3% in patients without comorbidity, from 12.1% to 33.8% in patients with comorbidities. Overall, 13.1% received a change in therapy without subsequent hospitalization, another 3.0% were hospitalized. Females were more likely to change therapy than males (15.9% vs. 10.5%, p < 0.0001) but not more likely to be hospitalized (3.0% for both). Failure rates were strongly associated with number of comorbidities (p = 0.0004), particularly in rates of subsequent hospitalization: 2.4% for no comorbidities, 4.9% for one comorbidity and 7.5% for multiple comorbidities. Hospitalization without secondary outpatient therapy was common: 13.5% for patients without comorbidity, 24.9% for one comorbidity, 28.6% for multiple comorbidities. CONCLUSION: While macrolides were the most common therapy, quinolone usage was substantial and rising rapidly regardless of comorbidity. Hospitalization for patients failing therapy was fairly common even in patients without comorbidity.

**PIN2**

**EFFECT OF INAPPROPRIATE ANTIBIOTIC THERAPY ON CLINICAL OUTCOMES OF PATIENTS WITH PSEUDOMONAS AERUGINOSA BACTEREMIA**

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OBJECTIVE: Infections due to P. aeruginosa are associated with increased likelihood of death and morbidity. Empiric therapy is often difficult due to increased resistance noted with this organism. The purpose of this study was to determine the impact of inappropriate initial empiric therapy on health outcomes of patients with P. aeruginosa bacteremia. METHODS: Retrospective cohort study of hospitalized patients with their first episode of P. aeruginosa bacteremia. Patients were stratified based on appropriateness of antipseudomonal therapy. Inappropriate initial empiric therapy was defined as receipt of antibiotic therapy to which the isolate displayed in vitro resistance. Data collected included discharge mortality, new ICU admit, need for ventilator therapy or hemodialysis, and length of hospital stay. RESULTS: A total of 87 patients (71% males/29% females) aged 58 ± 17 years (mean ± SD) were identified between January, 2002 to April, 2004. Overall mortality was 44%. Forty-nine percent of patients’ received inappropriate antibiotic therapy. ApacheII score were significantly higher in patients that died (p = 0.003). Mortality rates were significantly higher in patients treated with inappropriate empiric therapy (63%) compared to patients treated appropriately (39%, OR = 2.97, p = 0.024). New requirements for ICU admission, hemodialysis, or ventilator did not differ between the two groups. CONCLUSIONS: Inappropriate initial empiric therapy in patients with P. aeruginosa bacteremia significantly increased mortality rates.

**PIN3**

**DURATION OF ANTIBIOTIC TREATMENT IN HOSPITALIZED PATIENTS WITH COMPLICATED SKIN AND SKIN STRUCTURE INFECTIONS (cSSSI): FINDINGS FROM A CLINICAL STUDY COMPARING TIGECYCLINE AND VANCOMYCIN/AZTREONAM**

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OBJECTIVES: We sought to evaluate which risk factors may be implicated in prolonged duration of antibiotic treatment in hospitalized patients with complicated skin and structure infections (cSSSI). METHODS: We pooled data from two double-blind, randomized, multinational, clinical trials among patients with cSSSI. Patients were randomly assigned to receive either tigecycline (initial 100mg dose, followed by 50mg twice daily) or vancomycin with aztreonam (1g vancomycin plus 2g aztreonam, twice daily) via IV administration. Treatment termination was based on physician assessment of resolution of signs and symptoms of infection, with formal test of cure (TOC) at least 12-days later. We used a Cox proportional hazard (CPH) model to identify potential clinical risk factors for longer time-to-treatment termination. RESULTS: Among 1041 patients in the modified intent-to-treat (m-ITT) population with complete hospitalization data, deep/extensive cellulitis (59%) was the most common cSSSI diagnosis, spontaneous infection (51%) was the typical etiology, and diabetes (22%) was the most common comorbidity. No significant differences were observed in baseline characteristics. Median treatment duration was eight-days for each treatment group. The estimated CPH model identified diabetes (p < 0.0001), female sex (p = 0.017), infected ulcer (p = 0.001), and use of concomitant antibiotics (p = 0.002) as independent risk factors for significantly longer treatment duration. Adjusting for these risk factors, tigecycline was associated with a trend toward shorter treatment duration overall (p = 0.072) and within the diabetes, infected ulcer, and female strata. There was no difference across the treatment groups in the rate of cure at the TOC visit (p = 0.197). CONCLUSIONS: Diabetes, infected sex, infected ulcers, and use of concomitant antibiotics emerged as significant risk factors for prolonged treatment duration in cSSSI. Tigecycline, the first in a new antibiotic class, the glycylcyclines, was associated with a trend toward shorter treatment duration, once the risk factors were adjusted for.

**PIN4**

**IMPACT OF EMPIRIC ANTIFUNGAL THERAPY ON MORTALITY IN HOSPITALIZED PATIENTS WITH BLOODSTREAM CANDIDEMIA**

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OBJECTIVE: The objective of this study was to determine the impact of empiric antifungal therapy on mortality in hospitalized, non-neutropenic patients with bloodstream candidemia. METHODS: Retrospective cohort study to evaluate the effect of empiric therapy on mortality in patients with bloodstream candidemia. Medical and hospitalization history were collected from the medical charts of patients hospitalized from 2002 to 2004 with their first documented episode of candidemia. Patients were grouped by APACHEII scores and choice of empiric antifungal therapy (narrow spectrum: fluconazole or itraconazole; broad spectrum: amphotericin, caspofungin, or voriconazole). Impact