R2564
Abstract (publication only)

Use of tigecycline in intensive care: a French prospective observational study

P. Montravers*, H. Dupont, J.-P. Bedos on behalf of the Tigecycline Group

Objectives: Little information is available on tigecycline activity in patients (pts) with serious underlying disease or organ failure. This prospective observational study aimed at describing tigecycline prescribing patterns and pt outcomes in French ICUs. Methods: Data of all adult pts treated with tigecycline alone or in combination for suspected or documented infection in 26 ICUs were collected over 7 days. Response to treatment was classified as cure (no other treatment or surgery), failure (persistent/relapsing infection, infection-related death >48h after tigecycline start, discontinuation due to adverse effects), or undetermined (death <48h, tigecycline <4 days due to de-escalation, antibiotics for another infection). We distinguished the less (SOFA<=7) from the most (SOFA>7) severely ill pts. Results: 156 pts were included (09-2008 to 04-2010): 64% male, age 60±15 yrs, SAPS II on admission 42±16. At tigecycline start, 45% had a SOFA>7 (median 11 [8-24]); 34% had fatal underlying disease, 10% chronic renal failure, 33% were immunosuppressed and 19% diabetic. 93% had received antibiotics in the past 30 days. Tigecycline was given in first-line in 47% of pts, mostly in combination (67%), for intra-abdominal (IAI, 56%), skin and soft tissue (SSTI, 19%), or other infections (36%, mainly pulmonary 24%), and for 10±9 days in average. 84% of infections were hospital-acquired and 12% of pts had bacteremia. Tigecycline was stopped prematurely in 52% of pts, whatever the severity of illness, mainly due to resistant strain (n=13), clinical failure (n=14), de-escalation (n=20), death (n=14) or new infection (n=4). Response to treatment is shown in the table. The cure rate was 60% at the end of treatment and 53% at 7 days (SSTI 63%, IAI 54%, other infections 46%). Failure at the end of treatment was due to persistent infection (n=12), infection-related death >48h (n=4) or clinical failure (n=12), and at day 7 to relapse (n=32). At both time points, the cure rate was similar with tigecycline alone or in combination; in Gram-positive, Gram-negative and anaerobic infections; and in mono or polymicrobial infections. It was similar in the less and the most severely ill patients at the end of treatment but not 7 days later (table). TABLE Conclusion: In this severe ICU population, the success rates were comparable to those obtained in clinical studies using other antibiotics in ICU. Tigecycline is a valuable alternative for the management of serious infections in ICU.

Response to treatment	Total	SOFA<=7	SOFA>7	p-value
At the end of tigecycline:	N=156	N=86	N=70	
•Cure	93 (60%)	55 (64%)	38 (54%)	0.079
•Failure	28 (18%)	17 (20%)	11 (16%)	
•Undetermined	35 (22%)	14 (16%)	21 (30%)	
7 days later (or at discharge):	N=145	N=82	N=63	
•Cure	77 (53%)	49 (60%)	28 (44%)	0.044
•Failure	32 (22%)	19 (23%)	13 (21%)	
•Undetermined	36 (25%)	14 (17%)	22 (35%)	