

Supplementary data

Figures

Figure S1: Bacteria involved in 136 episodes of meningitis

Figure S2: Glasgow Outcome Scale for the groups of patients who did or did not receive rifampin for a community acquired meningitis (n=157)

Figure S3: Glasgow Outcome Scale for the groups of patients who did or not receive early rifampin (within the 24 first hours of hospitalization) or not for a community acquired meningitis (n=157)

Tables

Table S1: Comparison of patient characteristics, severity at ICU admission, microbiological data and therapeutic measures between survivors and non survivors after ICU admission for pneumococcal meningitis (n=76)

Table S2: Factors associated with ICU mortality for a cohort of 76 patients admitted for pneumococcal meningitis

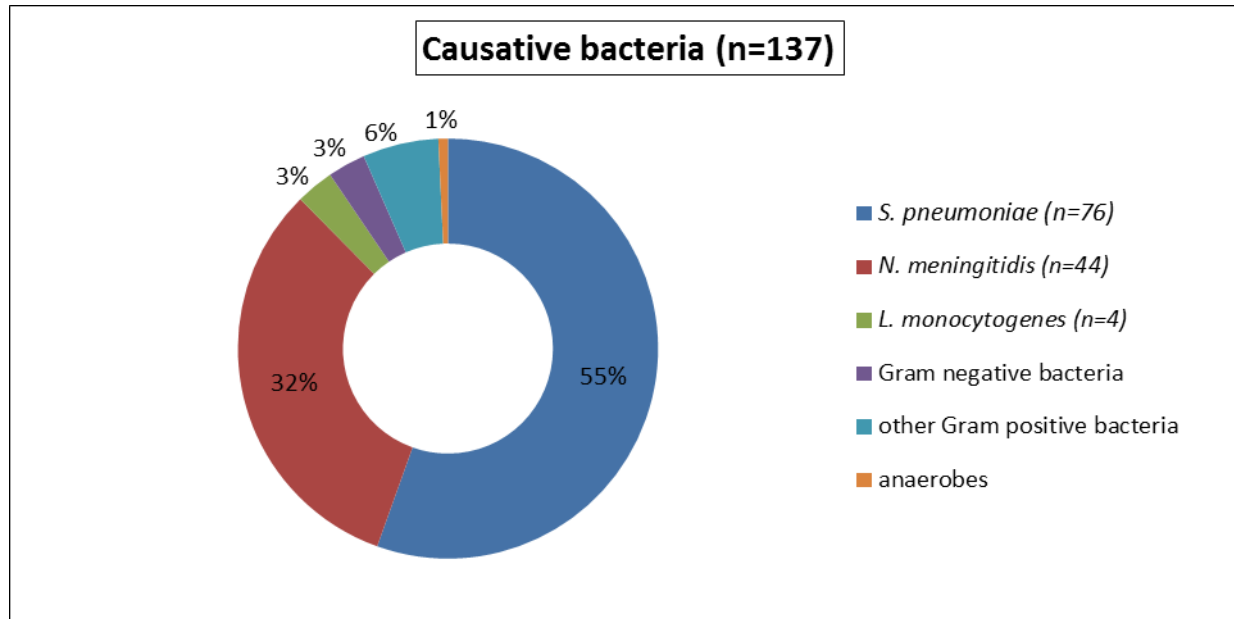


Figure S1: Bacteria involved in 136 episodes of meningitis

One patient had a co-infection so that 137 bacteria were involved in 136 infections.

Gram negative bacteria (n=4): *Haemophilus influenzae* (n=2), *Klebsiella pneumoniae* (n=1), *Capnocytophaga canimorsus* (n=1)

Other Gram positive bacteria (n=7): *Staphylococcus aureus* (n=2), *Streptococcus pyogenes* (n=2), *Streptococcus agalactiae* (n=2), *Streptococcus salivarius* (n=1), *Streptococcus intermedius* (n=1)

Anaerobes (n=1): *Fusobacterium sp.* (n=1; co-infection with *Streptococcus intermedius*)

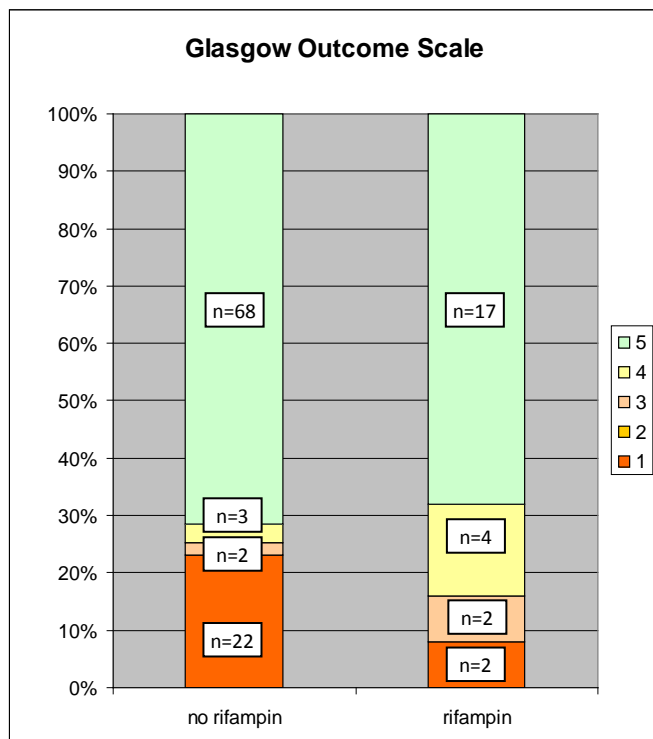


Figure S2: Glasgow Outcome Scale for the groups of patients who did or did not receive rifampin for a community-acquired meningitis

GOS at day 90 was available for 120 patients. None of them had a score of 2 (persistent vegetative state). Fisher's test showed statistical difference for GOS between the 2 subgroups of patients who had received or not rifampin ($p=0.017$)

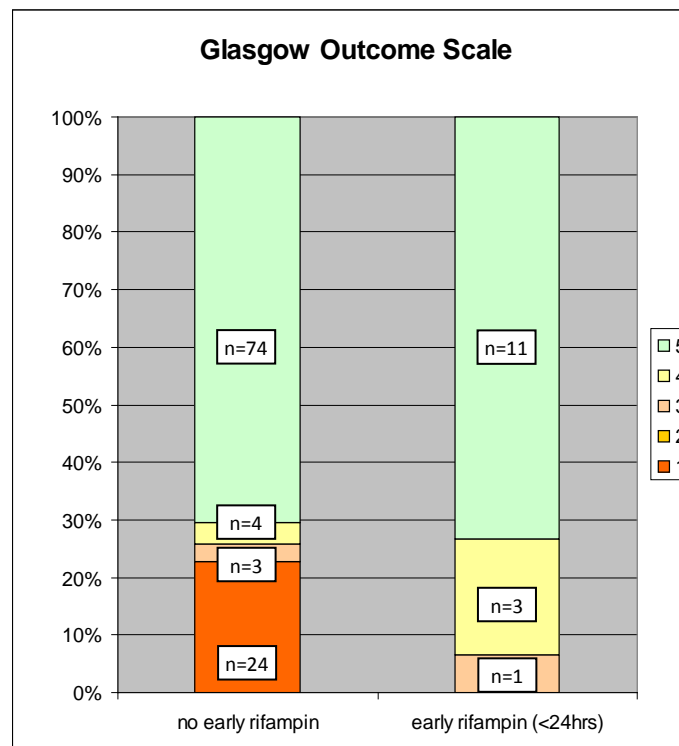


Figure S3: Glasgow Outcome Scale for the groups of patients who did or did not receive early rifampin (within the 24 first hours of hospitalization) or not for a community-acquired meningitis

GOS at day 90 was available for 120 patients. None of them had a score of 2 (persistent vegetative state) and no patient had a score of 1 in the 'early rifampin' group. Fisher's exact test showed statistical difference for GOS between the 2 subgroups of patients who had received early rifampin or no early rifampin ($p=0.014$)

	Non survivors n=18		Survivors n=58		p-value
Patient characteristics					
Age	67.2	[43.1 74.5]	49.7	[38.3 63.8]	0.124
Female sex	3/18	16,7%	25/58	43,1%	0.053
Immunosuppression	6/18	33,3%	15/58	25,9%	NS
Alcohol use disorder	4/18	22,2%	9/56	16,1%	NS
Asplenia	1/18	5,6%	3/58	5,2%	NS
HIV infection	2/18	11,1%	3/57	5,3%	NS
Severity at ICU admission					
Glasgow Coma Scale	6	[3 7]	10	[8 13]	<0.001
SAPS2	65	[53 77]	33	[24 44]	<0.001
Depressed conscious level	17/17	100,0%	34/45	75,6%	0.026
Respiratory failure	16/17	94,1%	24/45	53,3%	0.003
Hematological failure	9/17	52,9%	24/45	53,3%	NS
Cardiovascular failure	10/17	58,8%	13/45	28,9%	0.041
Renal failure	9/17	52,9%	8/45	17,8%	0.01
Hepatic failure	-		-		
Microbiology					
CSF white-cell count per mm ³	1500	[290 3100]	1740	[388 5300]	NS
CSF protein rate g/L	8.7	[5.1 10.7]	3.2	[2.3 5.9]	0.001
Positive direct examination of CSF	13/17	76,5%	48/58	82,8%	NS
Therapeutic measures					
Time between hospital admission and first dose of antibiotic (hours)	3.8	[1.5 7]	2.5	1 7	NS
Combination of antibiotics as initial therapy	17/18	94,4%	55/58	94,8%	NS
Treatment with rifampin during the hospitalization	2/18	11,1%	18/58	31,0%	0.129
Early treatment with rifampin (within the 24 first hours)	0/18	0,0%	13/58	22,4%	0.031
Treatment with vancomycin during the hospitalization	15/18	83,3%	47/58	81,0%	NS
Early treatment with vancomycin (within the 24 first hours)	12/18	66,7%	40/58	69,0%	NS
Treatment with corticosteroids during the hospitalization	14/18	77,8%	48/58	82,8%	NS
Time between hospital admission and first dose of corticosteroids (hours)	8	[5.6 13]	5.6	[1.6 7.5]	0.034

Table S1: Comparison of patient characteristics, severity at ICU admission, microbiological data and therapeutic measures between survivors and non survivors after ICU admission for pneumococcal meningitis (n=76)

Data are proportion (%) of patients or median values [interquartile range].
P-value<.2 are detailed. P-value<.05 were considered significant (bold).

	OR	95% IC		<i>p</i>
Cardiovascular failure	7.5	[1.3	44.2]	0.027
Renal failure	7.5	[1.3	44.2]	0.027
Respiratory failure	21.6	[1.2	404.5]	0.040
Early antibiotics administration (<2hrs)				NS
Hematological failure				NS
Age (>75)				NS
Corticosteroids administration				NS
Female sex				NS
Immunosuppression				NS
Early treatment with rifampin (<24hrs)				NS

Table S2: Factors associated with ICU mortality for a cohort of 76 patients admitted for pneumococcal meningitis

Incomplete observations were excluded from the binary logistic analysis. The presented model is from 62 observations and yielded the highest likelihood ratio.

P-value<.2 are detailed. *P-value*<.05 were considered significant (bold).