

ตารางที่ 1 Microorganism isolated from 142 episodes of septicemia according to acquisition of infection

Microorganism	Acquisition		Total
	Community	Hospital	
<i>Pseudomonas</i> spp.	4	40	44
<i>Klebsiella pneumoniae</i>	3	9	12
<i>Enterobacter</i> spp.	2	7	9
<i>Escherichia coli</i>	1	7	8
<i>Salmonella</i> spp.	5	2	7
<i>Acinetobacter</i> spp.	1	4	5
<i>Serratia marcescens</i>	0	1	1
<i>Hemophilus parainfluenza</i>	1	0	1
Other aerobic Gram-negative bacteria	5	6	11
<i>Streptococcus</i> spp.	11	4	15
<i>Staphylococcus</i> spp.	8	7	15
<i>Candida</i> spp.	0	6	6
Polymicrobial	1	7	8
Total	42	100	142

ตารางที่ 2 Microorganism isolated from 142 episodes of septicemia according to underlying conditions

Microorganism (episodes)	Underlying conditions		Normal
	immunodeficiency condition	Newborn	
<i>Pseudomonas</i> spp. (44)	8	27	9
<i>Klebsiella pneumoniae</i> (12)	3	3	6
<i>Enterobacter</i> spp. (9)	4	4	1
<i>Escherichia coli</i> (8)	4	1	3
<i>Salmonella</i> spp. (7)	2	0	5
<i>Acinetobacter</i> spp. (5)	1	2	2
<i>Serratia marcescens</i> (1)	0	0	1
<i>Hemophilus parainfluenza</i> (1)	0	0	1
Other aerobic Gram- negative bacteria (11)	3	5	3
<i>Streptococcus</i> spp (15)	4	1	10
<i>Staphylococcus</i> spp. (15)	2	6	7
<i>Candida</i> spp. (6)	1	4	1
Polymicrobial (8)	4	2	2
Total (142)	36	55	51

ตารางที่ 3 Clinical information of 8 episodes of polymicrobial infection

Case No.	Underlying condition(age)	Organisms	Associated factors
1.	Tetanus neonatorum	Klebsiella + Enterobacter	Omphalitis
2.	Esophageal stricture (2 years)	Klebsiella + E.coli	Parenteral nutrition, Intravenous catheter
3.	Acute leukemia (3 years)	Acinetobacter + Ps.cepacia	Intravenous catheter
4.	Wilm's tumor (2 years)	Acinetobacter + Ps.maltophilia	Diarrhea
5.	Lymphoma (7 years)	Enterobacter + Ps.aeruginosa	Diarrhea, GI bleeding
6.	Chronic subdural hematoma (5 years)	Klebsiella + Enterobacter	Secondary peritonitis (Bowel perforation)
7.	Neonate	Acinetobacter + Staphylococcus	Pyodermia, omphalitis
8.	Kwashiokor (11 months)	Enterobacter + Candida spp.	Diarrhea

ตารางที่ 4 127 Microorganisms isolated from 105 blood specemens in patients without clinical sepsis (contamination)

Microorganisms	episodes
Staphylococcus epidemidis	35
Staphylococcus saprophyticus	9
Staphylococcus aureus	2
Streptococcus spp.	6
Bacillus spp.	5
Corynebacterium	2
Propionibacterium	1
Flavobacterium	1
Pseudomonas cepacia	10
Pseudomonas aeruginosa	3
Pseudomonas spp.	13
Klebsiella pneumoniae	8
Enterobacter spp	8
Acinetobacter spp.	7
Escherichia coli	2
Achromobacter	2
Salmonella enteritidis	1
Other aerobic Gram-negative bacteria	7
Candida species	3
Other fungus	2

ตารางที่ 5 Case fatality rate in 140 episodes of septicemia

Microorganisms	No. of cases	No. of deaths	case-fatality rate (%)
<i>Pseudomonas</i> spp	43	13	30
<i>Klebsiella pneumoniae</i>	11	3	27
<i>Enterobacter</i> spp	9	2	22
<i>Escherichia coli</i>	8	5	63
<i>Salmonella</i> spp	7	0	0
<i>Acinetobacter</i> spp	5	2	40
<i>Serratia marcescens</i>	1	0	0
<i>Hemophilus parainfluenza</i>	1	0	0
Other aerobic Gram-negative bacteria	11	3	27
<i>Streptococcus</i> spp	15	5	33
<i>Staphylococcus</i> spp	15	2	13
<i>Candida</i> spp	6	3	50
Polymicrobial	8	2	25
Total	140	40	28.6

ตารางที่ 6 Factors influence fatality rate in septicemia

Factors	Death/total	(CFR)	OR (95% CI)	p. value
Acquisition				
: Hospital	33/99	(33)		
: Community	7/41	(17)	0.41 (0.15-1.10)	0.08
Underlying condetion				
: Normal	6/50	(12)	1	
: Newborn	20/50	(36)	4.19 (1.31-14.67)	0.004
: Immunodeficiency	14/35	(40)	4.89 (1.53-17.11)	0.003
Absolute neutrophil count				
: > 1,000/cumm.	26/109	(24)		
: < 1,000/cumm.	12/25	(48)	2.98 (1.11-8.05)	0.028
Antimicrobial therapy				
: Appropriate	14/101	(14)		
: Inappropriate	26/39	(67)	12.43 (4.79-32.99)	< 0.0001

CFP = Case fatality rate in percent

OR (95% CI) = odds ratio (95% confidence interval)

ตารางที่ 7 Fatality according to antimicrobial therapy and underlying conditions

Underlying conditions	Appropriate therapy Death/Total (CFR)	Inappropriate therapy Death/Total (CFR)	RR (95% CI) p. value
Newborn	0/38 (0)	6/12 (50)	∞ (N/A) p** < 0.0001
Newborn	8/38 (21)	12/17 (71)	2.14 (1.23-3.73) p* = 0.001
Immunodeficiency	6/25 (24)	8/10 (80)	2.11 (1.13-3.93) p** = 0.006
Total	14/101 (14)	26/39 (67)	2.58 (1.65-4.06) p** < 0.0001

CFR = Case fatality rate in percent

RR (95% CI) = relative risk (95% confidence interval)

p* = Yates corrected Chi-squares test

p** = Fisher's exact test

ตารางที่ 8 Logistic regression analysis

Variable	OR (95% CI)	p. value
Newborn	5.6* (1.67-18.81)	0.0053
Immunodeficiency	7.65* (2.04-28.68)	0.0025
Antibiotic = inappropriate	15.77 (5.88-42.26)	0.0000

* Compared with normal host

OR (95% CI) = odds ratio (95% confidence interval)

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ตารางที่ 9 Logistic regression analysis

Variable	OR (95% CI)	p. value
Newborn	5.6* (1.67-18.81)	0.0053
Immunodeficiency	1.37** (0.48-3.92)	0.5625
Antibiotic = inappropriate	15.77 (5.88-42.26)	0.0000

* Compared with normal host

** compared with newborn group

OR (95% CI) = odds ratio (95% confidence interval)