

Table E1
Distribution of organisms, by operative site and classification

			Total hip arthroplasty									Total knee arthroplasty											
			Class A			Class B			Class C			Class A			Class B			Class C					
				% of total cultures		% of organ- isms	% of cases in joint/ class		% of organ- isms	% of cases in joint/ class		% of organ- isms	% of cases in joint/ class		% of organ- isms	% of cases in joint/ class		% of organ- isms	% of cases in joint/ class		% of organ- isms	% of cases in joint/ class	
Organism	<i>n</i>		<i>n</i>			<i>n</i>			<i>n</i>			<i>n</i>			<i>n</i>			<i>n</i>			<i>n</i>		
<i>Staphylococcus aureus</i>	67	35%	12	18%	48%	25	37%	33%	3	4%	30%	4	6%	50%	17	25%	28%	6	9%	40%			
<i>Staphylococcus epidermidis</i>	61	31%	6	10%	24%	25	41%	33%	0	0%	0%	2	3%	25%	26	43%	43%	2	3%	13%			
<i>Streptococcus</i> sp.	22	11%	3	14%	12%	7	32%	9%	3	14%	30%	0	0%	0%	7	32%	11%	2	9%	13%			
<i>Enterococcus</i> sp.	14	7%	0	0%	0%	8	57%	11%	0	0%	0%	1	7%	13%	5	36%	8%	0	0%	0%			
<i>Escherichia coli</i>	4	2%	0	0%	0%	2	50%	3%	0	0%	0%	0	0%	0%	1	25%	2%	1	25%	7%			
<i>Pseudomonas aeruginosa</i>	5	3%	0	0%	0%	1	20%	1%	2	40%	20%	0	0%	0%	2	40%	3%	0	0%	0%			
<i>Corynebacterium</i> sp.	4	2%	0	0%	0%	2	50%	3%	0	0%	0%	0	0%	0%	1	25%	2%	1	25%	7%			
Other	17	9%	4	24%	16%	5	29%	7%	2	12%	20%	1	6%	13%	2	12%	3%	3	18%	20%			
Total cultures:	194	100%	25	13%	100%	75	39%	100%	10	5%	100%	8	4%	100%	61	31%	100%	15	8%	100%			

Table E2
Antibiotic sensitivity, by classification, organism, and stage (%)

Organism	Antibiotic	Overall Sensitivity	Class A	Class B	Class C
<i>Staphylococcus aureus</i>	Cefazolin	74%	67%	74%	88%
	Clindamycin	75%	72%	76%	89%
	Gentamicin	89%	94%	86%	100%
	Vancomycin	100%	100%	100%	100%
<i>Staphylococcus epidermidis</i>	Cefazolin	44%	25%	47%	50%
	Clindamycin	68%	50%	70%	100%
	Gentamicin	87%	67%	90%	100%
	Vancomycin	98%	100%	98%	100%
Streptococcus sp.	Cefazolin	100%	100%	100%	100%
	Gentamicin	100%	N/A	100%	100%
	Vancomycin	100%	100%	100%	100%
Enterococcus sp.	Ampicillin	57%			
	Penicillin	50%			
	Vancomycin	54%			
<i>Pseudomonas aeruginosa</i>	Gentamicin	80%			
	Ciprofloxacin	60%			

All Organisms		
	Preoperative treatment (reimplantation)	No preoperative treatment
Cefazolin	0%	63%
Clindamycin	43%	77%
Gentamicin	20%	91%
Vancomycin	78%	97%

Table E3
Regional variations in microbial profile

Species	Chicago		New York	
	Number of cultures	Percent positive cultures	Number of cultures	Percent positive cultures
<i>Staphylococcus aureus</i>	50.....	45%	17.....	20%
<i>Staphylococcus epidermidis</i>	26.....	24%	34.....	40%
<i>Streptococcus</i> sp.	12.....	11%	10.....	12%
<i>Enterococcus</i> sp.	6.....	5%	8.....	9.5%
<i>Escherichia coli</i>	3.....	3%	8.....	9.5%
<i>Pseudomonas aeruginosa</i>	2.....	2%	1.....	1%
<i>Corynebacterium</i> sp.	1.....	1%	3.....	4%
Other	10.....	9%	3.....	4%
Total positive cultures	110	100%	84.....	100%