

Supplementary Table I: Univariate and multivariate analysis for patients' characteristics and risk factors for surgical site infections (SSI) at All India Institute of Medical Sciences, New Delhi

Characteristic	Total no. of patients (n=890)	No. of patients with SSI (n = 62)	Incidence of SSI (95% CI)	Univariate analysis odds ratio (95% CI)	P value*	Multivariate analysis odds ratio (95% CI)	P value based on likelihood ratio
Gender					0.823		0.823
Female	255	17	6.7 (4.1-11)	1			
Male	635	45	7.1 (5.3-9.4)	1.1 (0.6-2)			
Age Groups (yr)					0.297		0.297
10-29	280	25	8.9 (6-13)	1			
30-49	323	23	7.1 (4.7-11)	0.8 (0.4-1.4)			
0-69	184	9	4.9 (2.4-9.4)	0.5 (0.2-1.1)			
≥ 70	103	5	4.9 (1.8-12)	0.5 (0.2-1.3)			
Duration of surgery (min)					0.4		0.4
<60	225	12	5.3 (2.9-9.4)				
60-120	352	24	6.8 (4.5-10)	1			
>120	313	26	8.3 (5.6-12)	1.6 (0.8-3.4)			
Ward					<0.001		<0.001
Ortho ward	838	47	5.6 (4.2-7.4)	1			
Surgery ward	52	15	29 (18-43)	6.8 (3.4-13.1)			
Wound class					<0.001		<0.001
Clean	825	40	4.8 (3.5-6.6)	1			
Clean contaminated	63	21	33 (22-46)	9.8 (5.3-18)		4.2 (2.0-8.9)	
Contaminated	2	1	50 (9.5-91)	19.6 (0.8-502)			
Surgeons' grade					0.128		0.128
Consultant	569	35	6.2 (4.4-8.5)	1			
Resident	288	26	9 (6.1-13)	1.5 (0.9-2.6)			
ASA class					0.189		0.189
Class I	567	42	7.4 (5.5-10)	1			
Class II	233	11	4.7 (2.5-8.5)	0.6 (0.3-1.2)		0.6 (0.3-1.2)	
Class III, IV & V	90	9	10 (5-19)	1.4 (0.6-2.8)			
SSI risk index					0.069		0.069
0	674	42	6.2 (4.6-8.4)	1			
1	205	17	8.3 (5.1-13)	1.4 (0.7-2.4)			
2 & 3	11	3	27 (7.3-61)	5.6 (1.2-20.3)		5.2 (1.0-27.2)	
Surveillance period					<0.001		<0.001
May 2018 - Jan 2019	518	22	4.2 (2.7-6.5)	1			
Feb 2019 - Oct 2019	299	34	11 (8.1-16)	2.9 (1.7-5.1)		2.1 (1.2-3.7)	
Jan 2020 - July 2020	73	6	8.2 (3.4-18)	2 (0.7-4.9)			
Surgical procedures							
Amputation	6	0	0 (0-48)		0.351		.
Cholecystectomy	0	0					
CRIF	305	10	3.3 (1.7-6.1)	0.4 (0.2-0.7)	<0.001		<0.001

Contd...

Characteristic	Total no. of patients (n =890)	No. of patients with SSI (n = 62)	Incidence of SSI (95% CI)	Univariate analysis odds ratio (95% CI)	<i>P</i> value*	Multivariate analysis odds ratio (95% CI)	<i>P</i> value based on likelihood ratio
Debridement	24	13	54 (33-74)	19.7 (8.4-47.1)	<0.001	14.3 (4.5-44.8)	<0.001
Gastrojejunostomy	0	0					
Laparotomy without bowel injury	19	5	26 (10-51)	5.1 (1.6-13.9)	0.008	4.8 (1.3-17.7)	0.008
ORIF	467	33	7.1 (5-9.9)	1 (0.6-1.7)	0.902	2.4 (1.2-4.9)	0.902
Abdominal	1	0	0 (0-95)		0.704		.
Head & Neck	6	0	0 (0-48)		0.351		.
Lower limb	7	1	14 (0.8-58)	2.3 (0.1-13.4)	0.499		0.498
Spinal	0	0					
Upper limb	1	0	0 (0-95)		0.704		.

Note: OR (95%CI), odds ratio with 95% confidence interval.
*Univariate Logistic Regression

Characteristic	Total no. of patients (n = 1,651)	No. of patients with SSI (n =25)	Incidence of SSI (95% CI)	Univariate analysis odds ratio (95% CI)	<i>P</i> value*	Multivariate analysis odds ratio (95% CI)	<i>P</i> value based on likelihood ratio
Abdominal	187	12	6.4 (3.5-11)	7.7 (3.4-17.1)	<0.001	3.9 (1-15.7)	<0.001
Head & Neck	97	1	1 (0.1-6.4)	0.7 (0-3.2)	0.671		0.671
Lower limb	405	0	0 (0-1.2)		<0.001		.
Spinal	319	6	1.9 (0.8-4.3)	1.3 (0.5-3.2)	0.561	3.2 (0.7-15.3)	0.561
Upper limb	33	0	0 (0-13)		0.313		.

Note: OR (95%CI), odds ratio with 95% confidence interval.
*Univariate Logistic Regression

Supplementary Table III: Univariate and multivariate analysis for patients' characteristics and risk factors for surgical site infections (SSI) at Tata Memorial Hospital, Mumbai

Characteristic	Total no. of patients (n = 549)	No. of patients with SSI (n = 74)	Incidence of SSI (95% CI)	Univariate analysis odds ratio (95% CI)	P value*	Multivariate analysis odds ratio (95% CI)	P value based on likelihood ratio
Gender					0.4		0.4
Female	179	21	12 (7.6-18)	1			
Male	370	53	14 (11-18)	1.3 (0.7-2.2)			
Age groups (yr)					0.009		0.009
10-29	130	9	6.9 (3.4-13)	1			
30-49	212	25	12 (7.9-17)	1.8 (0.8-4.2)		2.5 (1.1-5.9)	
50-69	180	35	19 (14-26)	3.3 (1.6-7.4)		5 (2.1-12.1)	
≥ 70	27	5	19 (7-39)	3.1 (0.9-9.8)		5.7 (1.6-20.6)	
Duration of surgery (min)					0.006		0.006
<60	32	1	3.1 (0.2-18)	1			
60-120	37	1	2.7 (0.1-16)	0.9 (0-22.4)			
>120	480	72	15 (12-19)	5.5 (1.2-98.1)			
Wound class					0.824		0.754
Clean	194	25	13 (8.7-19)	1			
Clean contaminated	354	49	14 (11-18)	1.1 (0.7-1.8)			
Contaminated	1	0	0 (0-95)				
Surgeons' grade					<0.001		<0.001
Consultant	210	12	5.7 (3.1-10)	1			
Resident	334	60	18 (14-23)	3.6 (2-7.2)			
ASA class					0.107		0.552
Class I	349	46	13 (9.9-17)	1			
Class II	186	28	15 (10-21)	1.2 (0.7-1.9)			
Class III, IV & V	14	0	0 (0-27)				
SSI risk index					<0.001		<0.001
0	145	6	4.1 (1.7-9.2)	1			
1	394	68	17 (14-21)	4.8 (2.2-12.7)		5.2 (2.2-12.5)	
2	10	0	0 (0-34)				
Surveillance period					0.686		0.686
May 2018 - Jan 2019	15	3	20 (5.3-49)	1			
Feb 2019 - Oct 2019	382	49	13 (9.7-17)	0.6 (0.2-2.7)			
Jan 2020 - July 2020	152	22	14 (9.5-21)	0.7 (0.2-3.1)			
Surgical procedures					0.59		.
Amputation	1	0	0 (0-95)				
Cholecystectomy	1	1	100 (5.5-100)				
CRIF	0	0					
Debridement	0	0					
Gastrojejunostomy	1	1	100 (5.5-100)				
Laparotomy without bowel injury	0	0					
ORIF	0	0					

Contd...

Characteristic	Total no. of patients (n = 549)	No. of patients with SSI (n = 74)	Incidence of SSI (95% CI)	Univariate analysis odds ratio (95% CI)	<i>P</i> value*	Multivariate analysis odds ratio (95% CI)	<i>P</i> value based on likelihood ratio
Abdominal	12	1	8.3 (0.4-40)	0.6 (0-3)	0.574		0.574
Head & Neck	349	49	14 (11-18)	1.1 (0.7-1.9)	0.609		0.609
Lower limb	148	20	14 (8.6-20)	1 (0.6-1.7)	0.989	1.8 (0.9-3.5)	0.988
Spinal	6	0	0 (0-48)		0.186		.
Upper limb	17	1	5.9 (0.3-31)	0.4 (0-2)	0.303		0.303

Note: OR (95% CI), odds ratio with 95% confidence interval.
*Univariate Logistic Regression