

Outcomes of Major Surgery in Patients Above 85 Years Old

Hospital Authority Convention 2013

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Aim and method

- ♦ To review mortality and morbidities of major surgery in patients above 85 years old, and factors that contribute to mortality
- ♦ From May 2009 to March 2012
- ♦ All patients with “Major” / “Ultra-major” OT drawn from CDARS
- ♦ Analysed ASA status, APACHE II score and ECOG status pre-op
- ♦ Post-op complications, mortalities, length of stay and survival were analysed

Results

- ♦ Total 180 patients; median age was 88
- ♦ 87% Emergency OT; 13% Elective OT
- ♦ Overall hospital mortality was 28%
- ♦ Comparing Emergency and elective OT:

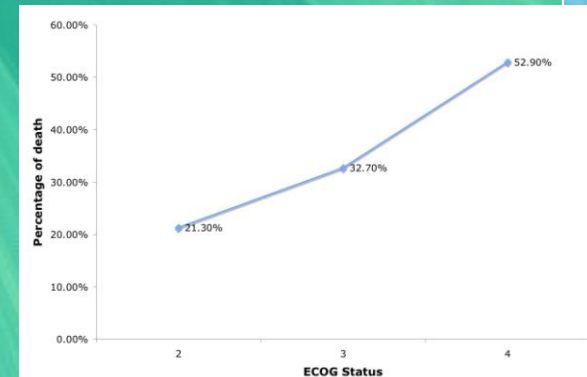
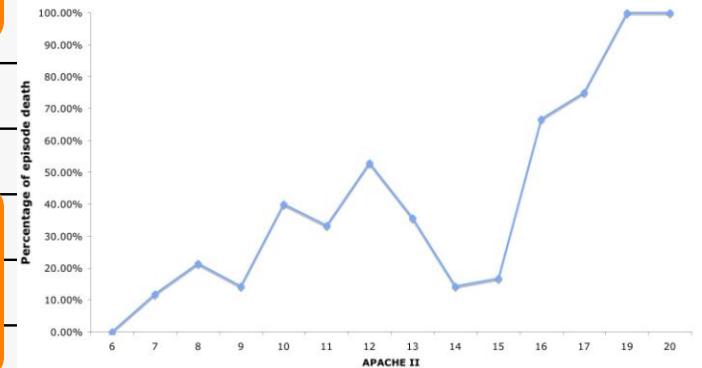
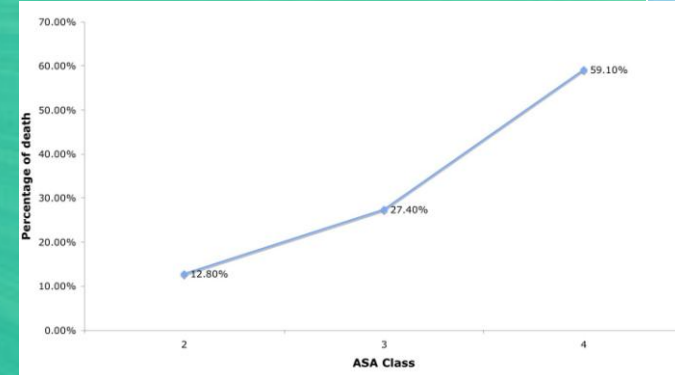
Table 1: Comparing Emergency and Elective Operations

	Emergency	Elective	p-value
Complications	75%	26%	<0.001
Episode death	31%	4%	0.007
ASA 3 or above	80%	64%	0.08
APACHE > 10	47%	22%	0.022
ECOG 3 or above	43%	22%	0.056
Median Survival (months)	11	23	<0.001

Results

Table 2: Significant Risk Factors Associated with Death in Same Admission

		Survival	Death	Percentage	p-value
Age	85-89	93	30	24%	0.136
	• 90	37	20	35%	
APACHE II score	≤ 10	84	17	17%	<0.001
	> 10	46	33	42%	
ECOG	≤ 2	85	23	21%	0.017
	> 2	45	27	38%	
ASA	≤ 2	34	5	13%	0.016
	> 2	94	45	32%	
Number of co-morbidities	? 2	86	28	25%	0.205
	> 2	44	22	33%	
Mean Arterial Pressure	≤ 90mmHg	78	22	22%	0.022
	> 90mmHg	46	28	38%	
Laparotomy	Yes	101	49	3%	0.001
	No	29	1	33%	
Type of OT	Elective	22	1	4%	0.007
	Emergency	108	49	31%	
Blood loss	≤ 200ml	101	32	24%	0.022
	> 200ml	21	16	43%	
Duration of operation	≤ 120min	67	24	26%	0.671
	> 120min	63	26	29%	
Postop care	Ward	96	17	15%	<0.001
	ICU/Traum Bed	34	33	49%	
Post-op Inotrope	No	109	11	9%	<0.001
	Yes	21	39	65%	
Post-op ventilator	No	98	10	9%	<0.001
	Yes	31	40	56%	
Post-op Complications	Yes	78	45	36%	<0.001
	No	52	5	9%	



Conclusion

- ♦ Extreme age group with urgent surgical diseases have higher pre-operative risk factors
- ♦ Emergency major operations has higher complication rate, higher hospital mortality and shorter post-operative survival compared to elective operations
- ♦ Careful selections and risk factors evaluation in individual patient should be considered

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