

4. Surgery

Emergency surgery >> Comorbidities

Cardiac and respiratory comorbidity were common. The numbers are small, but an increased risk of mortality is seen with angina and heart failure. The presence of atrial fibrillation was associated with an increased mortality and this is in contrast to elective patients where atrial fibrillation was not associated with increased mortality, although the numbers are small. The presence of dyspnoea on exertion was associated with an increased mortality rate and it is recognised that in some patients the dyspnoea may have been due to cardiac pathology.

Table 12. Cardiac history and outcome (answers may be multiple)				
Cardiac history	Died within 30 days	% who died within 30 days	Alive at 30 days	Total n=264
None	25	27	69	94
Angina controlled	25	42	34	59
Angina uncontrolled	3	75	1	4
Heart failure within one month	5	83	1	6
Heart failure more than one month	7	58	5	12
Hypertension	35	46	61	96
MI/cardiac arrest this admission	2	33	4	6
MI 0-2 months before surgery	0	0	1	1
MI >2 months before surgery	17	45	21	38
Orthopnoea	4	57	3	7
Other	12	46	14	26
Not answered	1		0	1

Table 13. Cardiac signs and outcome (answers may be multiple)				
Cardiac signs	Died within 30 days	% who died within 30 days	Alive at 30 days	Total n=264
None	55	29	133	188
Peripheral oedema	9	50	9	18
Pulmonary oedema	2	67	1	3
Raised JVP / high CVP	3	75	1	4
Other	17	63	10	27
Unknown	10		15	25
Not answered	1		1	2

Table 14. ECG and outcome				
ECG	Died within 30 days	% who died within 30 days	Alive at 30 days	Total
Normal	28	24	88	116
AF rate >90	8	50	8	16
Other abnormality	32	45	39	71
Sub-total	68		135	203
Unknown	25		32	57
Not answered	1		3	4
Total	94		170	264

Table 15. Respiratory history and outcome				
Respiratory history	Died within 30 days	% died within 30 days	Alive at 30 days	Total
None	47	29	114	161
Dyspnoea on exertion	26	43	35	61
Dyspnoea at rest	1	25	3	4
Other	3	33	6	9
Sub-total	77		158	235
Unknown	16		10	26
Not answered	1		2	3
Total	94		170	264

Mortality was higher among morbidly obese patients (47%, 9/19) than patients of normal build (32%, 68/214) and all three cachectic patients died.

Only 6% (14/251) of emergency admissions were diabetic, lower than elective admissions (9%) but unlike the data from elective patients, diabetes was associated with an increased mortality (50%). However, the numbers are small and there was no information about diabetic status in 13 patients, making it impossible to draw any conclusion about the impact of diabetes on survival in this study.

There was an increased mortality rate among patients who were not fully conscious when assessed before operation. However, being comatose with a Glasgow Coma Score (GCS) of less than nine was not on its own a certain predictor of an adverse outcome. Two out of the seven patients with a GCS less than nine survived their operation and were discharged (Table 16).

Table 16. Glasgow Coma Score and outcome

Glasgow Coma Score	Died within 30 days	% died within 30 days	Alive at 30 days	Total
Fully conscious (15)	54	27	143	197
Intermediate (9-14)	32	60	21	53
Unconscious (3-8)	5	71	2	7
Sub-total	91		166	257
Unknown	3		3	6
Not answered	0		1	1
Total	94		170	264