

4. Surgery

Elective surgery >> Comorbidities

The large number of patients with cardiac and respiratory symptoms confirms the expectation of finding comorbidity in patients with abdominal aneurysms, especially hypertension and coronary artery disease. A history of heart failure more than one month before surgery was associated with a mortality rate of 21%. Few patients admitted for elective surgery had cardiac signs on admission but the presence of peripheral oedema was associated with a higher mortality. The presence of dyspnoea on exertion (a symptom associated with respiratory and cardiac disease) was also associated with an increase in mortality rate. Interestingly the presence of atrial fibrillation was not associated with increased risk of death although the number of cases was small. A large number of patients were classified as having other unspecified abnormalities on their ECG. However, the responses to this question by the surgeon may have been based on their own interpretation of the ECG or on a computerised analysis.

Table 2. Cardiac history in elective patients and their outcome $n=434$.
Answers may be multiple.

Cardiac history	Total	% that died within 30 days
None	134	7
Angina controlled/on exertion	93	9
Heart failure more than one month ago	14	21
Hypertension	179	6
MI more than two months ago	107	7
Other	68	40
Unknown	1	
Not answered	2	

Table 3. Cardiac signs in elective patients $n=434$.
Answers may be multiple.

Cardiac signs	Total	% that died within 30 days
None	362	6
Peripheral oedema	21	14
Other	49	8
Unknown	7	
Not answered	7	

Table 4. ECG and outcome $n=434$.
Answers may be multiple.

ECG	Total	% that died within 30 days
None	243	5
AF rate >90	20	<1
Other abnormality	145	9
Not answered	2	

Table 5. Respiratory history and outcome $n=434$.
Answers may be multiple.

Respiratory history	Total	% that died within 30 days
None	295	4
Dyspnoea on exertion	113	11
Dyspnoea at rest	2	<1
Other	12	<1
Not answered	4	

9% (39/423) of patients were diabetic which is in line with previous knowledge that diabetes is a common comorbidity in people with vascular disease. However, in this study the presence of diabetes was not associated with an increased mortality. The 30 day mortality for patients considered to have a normal build was 5% (21/382). 28 patients were considered to be morbidly obese (30 day mortality 11%) and five were cachectic (30 day mortality 20%).