

## 4. Surgery

### Emergency surgery >> Mode of admission

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19% of emergency admission patients were transferred from other hospitals.

The mortality rate for emergency admissions with symptoms related to their AAA is higher than for patients admitted electively even though the AAA may not have ruptured.

264 patients were admitted and underwent emergency AAA repair. Mortality after AAA repair following emergency admission was high with 36% (94/264) dying within 30 days of surgery. This contrasts with elective admissions, with a mortality rate of 6.2% (27/434).

For the 50 patients transferred from another hospital, the mortality was slightly better (28%, 14/50) compared to those operated on in the hospital to which they were first admitted, who had a 30 day mortality of 37% (80/214).

Why did transferred patients have a lower mortality? Patients considered for transfer should be sufficiently stable to withstand the journey and there must be a perception that their chance of survival will be increased by transfer to a unit with appropriate staff or other resources. This study did not collect data on how many patients were considered for transfer but did not reach the accepting hospital, either because of deterioration before transfer or death in transfer. Patients who survived transfer were therefore likely to have been subject to a greater degree of selection than those who were not transferred.

As discussed above, 20% (52/264) of the emergency admission patients were known to have an aneurysm before their admission and of these 16 died, 13 were recorded as being on a waiting list for open repair and five for endovascular repair. Since only 20-25% of patients whose aneurysm ruptures in the community will reach hospital alive<sup>3</sup>, it is likely that mortality amongst patients on the waiting list is somewhat higher than this.

#### Patients unsuitable for elective repair

There is always discussion about the proper course of action when a patient is admitted to hospital with an aortic aneurysm as an emergency when they have previously declined, or been turned down for elective repair. Because the relevant hospital notes may not be available in the acute setting, the clinician may not be aware of how and why the previous decision was made. In this study 11 (21%) of the 52 patients admitted with a known aneurysm had been classed as unsuitable for elective repair. NCEPOD did not collect data on what reasons lay behind the original decision to deem the patient as unsuitable for aneurysm repair. In the event, four of the 11 patients, (36%), survived and left hospital within 30 days.