

3. Organisation of vascular services

Destination after AAA repair >> Elective AAA repair

There was a extensive use of Level 3 ICU care after elective open AAA repair.

9% of patients were reported to have been nursed in recovery areas for a substantial period after surgery.

Hospitals were asked to specify their recommended immediate destination after an elective AAA repair. There were differences in the answers from different sized units. Respondents were specifically directed not to mark “recovery area” if the patient only received immediate post-anaesthetic care before transfer to one of the other destinations listed in Table 5.

Table 5. Size of vascular unit by recommended immediate destination for elective AAA repair *n*=181. *Answers may be multiple.*

Size of unit	Recovery area	ICU	HDU	Combined ICU/HDU	Vascular ward	General ward	Not answered
Large	2	15	20	10	1	0	0
Intermediate	1	46	31	29	0	0	3
Remote	1	7	2	3	0	1	2
Sub-total	4	68	53	42	1	1	5
Not answered	0	2	2	1	0	0	7
Total	4	70	55	43	1	1	12

The replies that gave “Combined ICU/HDU” as the patient’s destination after elective surgery make it difficult to assess the level of care given at those hospitals. It appears that overall, patients in large vascular units were more likely to go to HDU after elective AAA, whereas patients at intermediate and small units were more likely to go to ICU. Assuming that there is no difference in the case-mix between the various size units, this finding implies a misuse of resources by the smaller units. With modern anaesthesia and analgesia it is possible for patients to be warm, in a stable cardiovascular status and breathing spontaneously at the end of elective AAA repair, and therefore not to require Level 3 support. It is well recognised that the demand for Level 3 beds exceeds the supply so that patients should not be sent to ICUs when the resources of ICUs are not required. Anaesthetists, surgeons and intensivists should examine the destination of patients after elective AAA repair. If patients commonly are admitted to ICU Level 3 care they should investigate what is preventing these patients being cared for in Level 2 beds.

One possible reason for the use of Level 3 beds may be the quality of Level 2 care. There was anecdotal evidence from advisors that some hospitals with beds designated as being Level 2 standard find it difficult to provide nursing staff who are actually able to deliver Level 2 care on a consistent basis. In such circumstances, clinicians may feel that the only way to ensure safe care for patients after complex surgery is to admit them to Level 3 beds. “Comprehensive Critical Care”¹⁹ recommends that Level 2 and Level 3 beds should be adjacent so that skills may be used flexibly to prevent such situations arising. Investment following the publication of “Comprehensive Critical Care” has resulted in a larger increase in HDU than ICU beds, so cancellations will be less likely if AAA patients are scheduled for HDU care after surgery.

From the organisational questionnaire, 2% (4/169, no answer on 12 questionnaires) of hospitals specified that the recovery area was the intended destination after elective surgery. These recovery areas may have been specifically equipped and staffed to manage high level postoperative care. From the anaesthetic questionnaire, 9% (35/373) of elective patients were reported to have gone to the recovery area as a primary destination (57 questionnaires were

unanswered). Presumably staff were forced to keep patients in recovery areas because a staffed bed in HDU or ICU was not available when needed. Most recovery areas are not equipped to the standard required to care for patients after major surgery for substantial periods of time nor do they have adequate arrangements for medical cover. Despite the stress and upset to the patient, major surgery should not proceed unless all the essential elements of the care package (surgeon, anaesthetist, critical care facilities etc) are available.

If the provision of care for aortic surgery, elective or emergency, is changed so that surgery is transferred to another hospital, the resources for critical care must be transferred as well, otherwise the critical care facilities at the receiving hospital will be unable to cope with the extra workload.