

**Student:** Michaela Mullen

**Project:** A targeted quality of life analysis following abdominal aneurysm repair - Influence on treatment method

**Supervisors:** Dr Manar Khashram and Professor Justin Roake

**Sponsor:** Christchurch Radiology Group

**Introduction:**

An abdominal aortic aneurysm (AAA) is a dilation of the lower part of the aorta. In the over 60 population in New Zealand there is a prevalence of abdominal aortic aneurysm of 5%. If an aneurysm ruptures then 80% will die.

**Aim:**

There are two methods of repair for AAA, an open aortic repair and an endovascular aortic repair. The open repair is a significant operation and involves a large incision to expose the aneurysm enabling a graft to be sewn in. The endovascular repair is a less invasive operation and involves a stent graft being inserted through the groin into the aneurysm.

Randomised control trials show that there is no significant difference in the quality of life of patients following receiving either repair method at one year but there is no good quality long term data on quality of life.

**Method:**

The study ran over a three month period and included all patients who had received an abdominal aortic repair from the start of 2009 to the end of 2014. Over the 5 year period 381 patients had received either repair method. At the time of completing the interviews 114 were deceased leaving 267 eligible to participate. Patients were invited to complete a 20 minute interview either in person or over the phone which consisted of a general health survey called the SF-12 and a functional questionnaire with both quantitative and qualitative questions.

**Results:**

Currently, 201 patients have been interviewed with 30 refusing to participate and 4 having moved overseas. Of the 201 patients, 106 had received the open aortic repair and 95 had received the endovascular aortic repair. The functional outcomes obtained from the questionnaire showed that the majority of patients returned to their baseline activities after the operation.

Firstly, of 50 patients who were working prior to the repair, 66% were still working at the time of the interview. Of 164 patients who were driving preoperatively 90% had continued to drive. 98% of patients were living independently after the operation. Finally, 95% of patients would recommend the procedure that they had to a family member or a friend.

From the data collected from the SF-12 it showed that the health status of the study population was not different to that of the matched population. The patient perceived outcomes that were collected were generally excellent, with most patients pleased with the ease at which they were able to return to normal life. There was no difference in functional outcomes observed between either repair types. This showed that the majority of patients had a good quality of life following the operation.

**Conclusion:**

From the results obtained, realistic expectations will be able to be provided to patients prior to being offered or consenting to an abdominal aneurysm repair.