Screening for aortic abdominal aneurysm in New Zealand

Ross Lawrenson

A ruptured abdominal aortic aneurysm (AAA) is a lethal condition with approximately 240 recorded deaths in New Zealand each year. This number is proportionately much less than is seen in the United Kingdom (UK) where there are 6000 deaths per year. Most deaths occur in men aged over 65 years.

Interestingly the age-standardised incidence in both New Zealand and the UK is falling steadily, presumably as a result of the medical and life style interventions that have caused a similar fall in cardiac events. So although as the population ages we might expect an increase in the numbers of ruptured and fatal AAA, this increase is by no means certain if the age standardised incidence continues to fall. AAA can be diagnosed easily with ultrasound.

The number of elective repairs already being done in New Zealand would indicate that many patients are being diagnosed before becoming symptomatic and presumably in some patients their AAA has been an incidental finding of an ultrasound or CT investigation for another reason. AAA therefore seems to be a good candidate for an organised screening programme.

A number of randomised controlled trials have showed screening for AAA can save lives. This has led to the institution of AAA screening in number of countries including the UK and the USA. Within New Zealand there has been increasing support for an organised program from a group of vascular surgeons.

Some private radiology clinics are already offering screening for AAA for both men and women and there are anecdotal reports that some GPs are screening opportunistically for AAA. As for any screening program there is a balance between risk and benefit. The authors of the two papers in this edition have provided an estimate of the proportion of people in the community with AAA and have appraised the suitability of an AAA screening program against the New Zealand Screening criteria. Their conclusions are that there is a good argument for considering an organised screening program for AAA in New Zealand men—although they note that there are some areas that do require further consideration and where additional information would be useful.

The discussion about a possible introduction of yet another screening program needs to be held in the context of the changing face of health practice within NZ. There is currently a global financial crisis and whilst New Zealand has been relatively sheltered from its impact, the devastating earthquakes in Christchurch and the subsequent need to protect and prioritise government funding to support the region, makes stark the need to be financially responsible in our planning.

We also look as though we are moving from the inefficient organisation of health services based around numerous PHOs and District Health Boards to a more rational, regionalised approach to the provision of health care. What is needed in this
environment is a transparent and publicly acceptable way of deciding how to prioritise our spending.

We cannot afford unlimited health services and so the introduction of AAA screening needs to be considered against a range of existing or proposed new services. Currently it is unclear how such a decision is made. Another issue is that increasing technological demands have led to the centralisation of many health services and vascular surgery is now primarily offered in a limited number of hospitals within New Zealand.

With the increasing use of endovascular aortic repair (EVAR) as a treatment option for men with AAA it is likely that only centres who are expert in its use will be offering elective surgery. We do know that there are variations in the mortality rates from elective surgical repair—it has been shown that “incidental” elective repairs have a mortality rate of 6.1% but the rate in patients picked up from screening is 2.1%. Nair et al have shown the mortality rate for elective procedures in New Zealand is 6.7%. It maybe that the lower rate that is needed to make elective surgery acceptable can be achieved if only a limited number of centres are funded to deal with patients identified through a screening program. However this could mean that access to services for those in rural and provincial New Zealand would be problematic.

Those living in rural areas are proportionately more socially deprived and more likely to be Māori, so it is important that any proposed program does not exacerbate the already known inequities that exist. The adoption of the principles of “Better, sooner, more convenient” and the development of integrated family health centres poses a question as to how we should be delivering new preventative health services. The implementation of any new screening program needs to ensure equal access for all at risk New Zealanders. Should we see screening as part of the role of integrated family health centres with delivery of the intervention being a regional responsibility? How should funding, quality assurance and patient acceptability be ensured in such a model?

Overall there is increasing consensus that AAA screening meets many of the criteria of the screening program and therefore policy advice in this area needs to be developed and adopted by the Ministry of Health. However the Ministry will have to prioritise AAA screening against other competing demands. It would appear timely for a consensus approach to be undertaken involving key stakeholders including the representatives of vascular surgeons, radiologists, primary health organisations and District Health Boards to come to an agreed position as to how we deal with this issue.

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