Audit highlights extent of diabetes and liver issues in Northern Territory

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The Northern Territory Audit of Surgical Mortality (NTASM) 2010-2016 Report was released today, and it highlighted that NT patients were considerably more likely to present with diabetes or hepatic (liver) issues, but had lower rates of cardiovascular disease compared to elsewhere in Australia.

The NTASM Report involves the clinical review of all cases where patients had died while under the care of a surgeon. NT General Surgeon and RACS Councillor, Associate Professor Phill Carson, said that one of the many key findings from the report was the significantly higher rates of diabetes and hepatic disease amongst NTASM patients, compared to patients in the latest report of the Australian and New Zealand Audit of Surgical Mortality (ANZASM).

“Of the patients that were found to have at least one serious comorbidity, almost one in three had diabetes compared to one in five nationally, and approximately 30 percent had hepatic disease compared to just 8.3 percent in ANZASM,” A/Prof Carson said.

“Based on the informal reporting by surgeons, NTASM patients were three time more likely to report alcohol abuse than ANZASM patients. We know that there is a strong link between alcohol abuse and liver problems, so this may in part explain the higher rates of hepatic disease.

“The literature suggests that comorbidities are a much stronger predictor of mortality than the type of surgery being performed. When the numbers are significantly higher (as they are with diabetes and hepatic issues) obviously the patient is at much greater risk of complications.

“One promising sign was that NTASM patients had a reduced risk of cardiovascular disease of approximately 10 percent compared to ANZASM patients. However, cardiovascular disease remains a serious issue and was the most commonly reported comorbidity amongst NTASM patients.”

A/Prof Carson said poorer health conditions within Aboriginal communities were particularly noticeable in the report.

“Serious comorbidities continue to affect Aboriginal and Torres Strait Islander persons under the age of 50, at more than twice the rate of non-Aboriginal persons in this audit.”

“As surgeons who work closely with Aboriginal people, we recognise the impacts of alcohol on liver disease, and the impacts of renal failure and diabetes. One of the key recommendations from the audit is to promote an increased awareness of healthy lifestyles, by education and health management in all NT communities.”

Managed by the Royal Australasian College of Surgeons and funded by the Northern Territory Department of Health, the NTASM conducted clinical reviews into 304 surgically-related deaths that completed the full audit process from 1 January 2010 to 31 December 2016.
A/Prof Carson noted that the success of the audit was largely due to a 100 percent participation rate by NT surgeons and hospitals, and the ongoing funding provided by the Government. “The 100 percent participation rate in the NT means that the audit is able to generate high quality raw data, which in turn allows us to identify issues and trends, and develop accurate longitudinal comparisons over time”. “We have been extremely grateful for the support that we have received from successive governments, which has helped the audit to achieve its primary aim of providing feedback to participants about their performance, and to encourage reflection and learning about surgical care and practice.” "This not only helps us to self-regulate our profession, but also leads to valuable information becoming available to researchers and policy makers, as we have seen with the diabetes and hepatic disease examples in this report".

Other key points from the report included:

- Over the 6 year audit period there were 368 surgically-related deaths reported to NTASM.
- 65 percent of patients were male and 35 percent were female. In the latest ANZASM Report 55 percent of patients were male
- Serious comorbidities were present in 78.5 percent of patients
- The median age for Aboriginal and Torres Strait Islander patients was 52, compared to 69 for non-Aboriginal and Torres Strait Islander patients

The 2017 NTASM Report and also a summary are available on the RACS website:


Summary: [http://www.surgeons.org/media/25152093/NTASM-Report-Summary-2010-2016-FINAL-.pdf](http://www.surgeons.org/media/25152093/NTASM-Report-Summary-2010-2016-FINAL-.pdf)

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