

DNT Workshop, Lorne, March 2009

Summary of CARI Presentations and Discussions

1. Renovascular Disease Guidelines

The draft CARI Renovascular Disease Guidelines, which were circulated via the CARI website prior to the DNT Workshop, were presented by members of the Guideline Group. The Renovascular Disease guideline consists of 5 subtopics:

1. Natural history and progression of atherosclerotic renal vascular stenosis.
2. Screening tests for diagnosis of renal artery stenosis.
3. The role of inhibition of the renin angiotensin system and other medical therapies.
4. Endovascular treatment.
5. Role of distal protection.

The guideline recommendations and suggestions for clinical care for each subtopic and the supporting evidence were discussed at the workshop.

Key areas raised by the workshop participants were:

- The risks associated with screening.
- Definition of high grade stenosis.
- Role of captopril scans.
- Implication of the nature of renal artery stenosis (such as the degree of calcification) with respect to intervention and screening.
- The use of “drive by” angiograms (renal angiography performed by a cardiologist during an elective coronary intervention).
- Reference to the unpublished ASTRAL trial which represents the largest relevant RCT to date.
- Inclusion of Fibromuscular Dysplasia (FMD) and Flash Pulmonary Oedema (FPO).
- Suggestions for Clinical Care should reflect high CVD risk and the use of antiplatelets and statins etc.
- Inclusion of functional parameters such as eGFR.

The draft guidelines have been revised and are undergoing external peer review prior to publication. As part of this process, the discussion points from the DNT Workshop were collated for each subtopic and considered by the Guideline Group in the revision of the guidelines. Additional literature searches have been conducted to incorporate specific issues raised at the DNT Workshop including FPO and FMD, as well as the use of statins and antiplatelet agents.

2. Type 2 Diabetes Guidelines

The draft “Evidence Based Guidelines for the Diagnosis, Prevention and Management of Chronic Kidney Disease in Type 2 Diabetes” which were circulated via the CARI website prior to the DNT workshop were presented by members of the Guideline Group. The Type 2 Diabetes guidelines

were prepared in collaboration with The Diabetes Unit, Menzies Centre for Health Policy at the University of Sydney, for Diabetes Australia. The guidelines were prepared in accordance with NHMRC protocols and have subsequently been endorsed by the NHMRC Council for publication as part of a series of Type 2 Diabetes guidelines. The chronic kidney disease guidelines address the following questions:

1. How should kidney function be assessed and how often in people with type 2 diabetes?
2. How should chronic kidney disease be prevented and/or managed in people with type 2 diabetes?
 - a. What is the role of blood glucose control?
 - b. What is the role of blood pressure control?
 - c. What is the role of blood lipid modification?
 - d. What is the role of diet modification?
 - e. What is the role of smoking cessation?
3. Is the prevention and management of chronic kidney disease in people with type 2 diabetes cost effective and what are the socioeconomic implications?

Key issues raised by the workshop participants and discussed by the panel were:

- Need for age stratification to reflect possible lower cost-effectiveness for the elderly (>80 years).
- What is the benefit and practicality of the 24 hour urine recommendation? Non-compliance will be a significant problem.
- Blood pressure monitoring may be adequate for the elderly.
- Reliability of HbA1c within a CKD population.
- Is it appropriate for the guidelines to have a generic statement for HbA1c and not to have a lower limit for HbA1c given deleterious effects of going too low?
- Low dose aspirin considered?
- The inclusion of microalbuminuria in the “annual cycle of care” has been rebutted on cost grounds.
- Recommendations regarding referral should match the KHA CKD guidelines for GPs.
- The NHMRC process and implementation.
- Screening for albuminuria versus proteinuria, use of ACR and need for consensus approach for cut offs for creatinine, albumin and ACR.
- Dual blockade of ACEi/ARBs.
- Normotensive people with type 2 diabetes.
- Use of statins.

A number of the issues raised were addressed and clarified by the panel during the discussion. The subsequent revision of the draft guidelines focussed on a review of the recommendations and practice points against the issues raised at the workshop. This included reappraisal of evidence in relation to timed urine sample collection for Albumin Excretion Rate (AER) and blood glucose targets as well as use of dual blockade of ACEi and ARBs and statins. The revised guidelines were endorsed by the NHMRC council in June 2009 and have been approved for publication.

3. Acceptance onto Dialysis

The draft “Acceptance onto Dialysis” guidelines were presented at the DNT workshop by Grant Luxton. The draft guidelines had been posted on the CARI website prior to the workshop. The following subtopics are currently being developed for publication and were the subject of discussions at the Workshop:

1. Ethical considerations.
2. Quality of life.
3. Peritoneal dialysis versus haemodialysis.
4. Comorbidity (vascular disease).
5. Timing of referral of CKD patients to nephrology services.

The following issues were discussed at the workshop:

- Progression should be established before referral as a lot of people are stable. This could be done for example by monthly creatinine.
- Need to know that nephrologists can cope with the number of patients.
- Question whether the referral criteria correlate with KCAT.
- Could a Karnofsky score be undertaken on the patient.
- Information should be given back to the GP to help them manage the patient.
- The Korevaar et al 2003 trial is a small negative RCT and the generalisability is questionable. The draft recommendation regarding PD vs. HD may therefore not be supported.

The draft guidelines are being revised and are undergoing external peer review prior to publication. As part of this process, the discussion points from the DNT Workshop were collated for each subtopic and considered by the Guideline Group in the revision of the guidelines.

4. Vascular Access Implementation Project

A summary of the findings to date from the CARI Vascular Access Project was presented by Kevan Polkinghorne on behalf of the project's Steering Committee. The Vascular Access Implementation Project was initiated in 2007 with the aim of implementing two CARI Guidelines for vascular access, namely: 'Timing of access formation' and 'Choice of type of access.' Nine renal units in Australia and New Zealand are taking part in the study and are working with the CARI Guidelines project officer to identify the barriers to access creation at each of their units and to develop strategies and procedures to improve the number of fistulas created for incident haemodialysis patients. The overall aim of the project is to reduce catheter use at the first haemodialysis treatment in ESKD patients and to assess barriers to AVF placement and successful use.

The baseline phase took effect over a six-month period from January to June 2008. This was followed by the intervention phase which commenced in July 2008 and will finish in June 2009. The following is a summary of the barrier and baseline data analysis that was presented at the workshop.

- No unit agreed on CKD pathways or policy for GFR cut-offs for referral for pre-dialysis education or surgical intervention or access creation.
- The majority of the units thought that referral and access placement was occurring earlier (i.e. at a higher GFR) than shown by the baseline data.
- There is currently no central database to allow tracking of this information.
- A common view amongst the units was that the waiting times to see a surgeon were too long. However, the baseline data did not show this to be the case.
- The majority of CVC use is not explained by late referral.
- Patient education, patient denial and non-English speaking background is definitely a barrier at some units. In general, CVC use was associated with no patient education.
- Serum creatinine/GFR trends prior to dialysis showed the decline in GFR to be greater in CVC compared to AVF patients. The baseline data excluding late referral patients did not

suggest that the CVC use in these patients was a result of a steeper decline in renal function that was unforeseen by the treating team but due to other factors. Early referral may therefore reduce the extent that patients are “being caught out”.

- The majority of patients commencing with a CVC do not have an access in place at the time dialysis commences. There may be a failure to recognise patients with faster GFR decline and a failure of having in place an identified “dialysis preparation pathway”.

The following reflects the comments/questions made following the presentation:

- The data is disappointing, particularly if this is representative of practices across Australia. Was there a difference between units who have surgeons on site versus referrals from private practice? It was noted that while the data should be considered as representative, VMO versus private practice has not been looked at in this project.
- The issues raised have been known for years and a lot of the problem is a case of denial by the physicians. Between CKD Stages 3 to 5, mortality from comorbid disease is high. Particularly elderly patients do not want to know about dialysis. The important issue therefore is whether the patient is fit for dialysis or not. In response to this comment Kevan Polkinghorne noted that age is not an appropriate criterion for denying someone access to dialysis.