Management of Chronic Allograft Nephropathy: Bridging the Gap
A Nursing Perspective

British Columbia Transplant Society (BCTS)
Regional Transplant Clinic Nurses

Nephrology Days / October 2005
Outline

● Who we are, what is our question?
● Goal
● The Process
  – Nursing Framework of Care
  – Tools (patient & nursing)
BCTS Transplanting Hospitals & Regional Clinics
BCTS Regional Transplant Clinics

- Nurses meet monthly via teleconference
- Excellent forum for sharing information and discussing clinical issues

Question asked:
- “How do I take care of my patients with a failing renal transplant?”
What’s Out There & What’s Not

- **BCTs**
  - No provincial standards related to graft failure

- **BC Renal Agency**
  - No provincial standards related to graft failure

- **Neighbouring Pre-dialysis (CKD) Clinics**
  - Provide comprehensive, expert care to ESRD patients
  - No standards related to care of patients with CAN
  - Need to bridge the gap in providing care for patients transition from transplant to dialysis
BC Survey – Management of CAN

- Inconsistent care, poor transition to dialysis
- Duplication of services
- Untimely creation of access
- Late referral for re-transplant
- Limited communication between modalities
- Loose ends, lack of closure
Our Bottom Line:

We wanted to improve the care for our CAN patients!
Our Goal:

To develop a comprehensive provincial framework, in order to provide optimal & consistent nursing care for patients with Chronic Allograft Nephropathy (CAN).
The Process

Literature Search & Collaborative Planning Process
Chronic Allograft Nephropathy

What it’s not
Rejection

What it is
- Variable loss in kidney function
- Decrease in GFR
- Non-specific pathology
- Proteinuria
- Hypertension

Is the Care of CAN a Concern?

- Minor
- Moderate
- Major
- No
How Can We Improve Care?

- Early identification
- Education
- Co-morbidity management
- Dietary management
- Timely intervention for the transition from “well transplant” to “sick dialysis” patient
Literature Review
Nursing Perspective

- Limited literature published from a nursing perspective
  - Nursing care for patients with CAN hinges on the concept that renal disease is a continuum of care
  - There is transition between modalities

- Patients lived experience during this transition depends in part on the continuity of care they receive

(Neyhart, 2002)
Medical Perspective:

- Lack of communication during the transition from transplant to dialysis may be an additional barrier to aggressive co-morbid disease management (Gill et al., 2002)
- Transplant patients returning to dialysis have poorer renal function at time of dialysis and more profound anemia than non-transplant patients (Arias et al., 2002)
Classification of renal transplant patients by CKD stage may help clinicians identify patients at increased risk & target appropriate therapy to improve outcomes.

Findings support the use of the K/DOQI guidelines for CKD assessment in renal transplant recipients.

(Karthikeyan et al. 2004)
Literature Review: What’s Missing?

- No guidelines found for comprehensive care of patients with CAN, during transition between modalities (Transplant → Dialysis)
Transition Theory

What about a patient’s transition from transplant to dialysis?
Transition Theory

- Transition is an entirely unique and individual experience affecting patients as well as their support systems.

- Transition occurs as the patient begins to adjust to the diagnosis of failing graft and experiences the resulting life changes.
Factors in Patient Readiness

- Prior experience with dialysis
- Length of time with successful transplant
- Age of patient - independent versus dependent
- Feeling of wellness
- Life development (career, marriage, children)
- Socioeconomic level
- Presence of functioning access
- Cause of graft failure
- Experience with health care system
- Education level
Where Do We Go From Here?

- Involve the patient throughout the journey
- Be aware of “where patient is at”
- Communicate with other clinics
- Develop a Provincial Framework for the management of CAN
  - Integrate the stages of CKD into the clinical action plan
## Stages of Chronic Kidney Disease

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>GFR (mL/min/1.73 m²)</th>
<th>Action*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kidney damage with normal or ↑ GFR</td>
<td>≥90</td>
<td>Diagnosis and treatment, Treatment of comorbid conditions, Slowing progression, CVD risk reduction</td>
</tr>
<tr>
<td>2</td>
<td>Kidney damage with mild ↓ GFR</td>
<td>60–89</td>
<td>Estimating progression</td>
</tr>
<tr>
<td>3</td>
<td>Moderate ↓ GFR</td>
<td>30–59</td>
<td>Evaluating and treating complications</td>
</tr>
<tr>
<td>4</td>
<td>Severe ↓ GFR</td>
<td>15–29</td>
<td>Preparation for kidney replacement therapy</td>
</tr>
<tr>
<td>5</td>
<td>Kidney failure (or dialysis)</td>
<td>&lt;15</td>
<td>Replacement (if uremia present)</td>
</tr>
</tbody>
</table>

Chronic kidney disease is defined as either kidney damage or GFR <60 mL/min/1.73 m² for ≥3 months. Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests or imaging studies.

*Includes actions from preceding stages.

*Abbreviations: CVD, cardiovascular disease*
The Outcome

Framework of Care & Tools Developed
Nursing Framework of Care

Management of CAN

Stage 3
Evaluating & Treating Complications

Stage 4
Preparation for Renal Replacement Therapy

Stage 5
Bridge to Renal Replacement Therapy
Stage 3: GFR 30-59 (ml/min/1.73m²)

Evaluating and Treating Complications

- Aggressive Management of Co-morbidities
- Focus on Health Promotion
- Transplant is a treatment, not a cure
Aggressive Management of Co-Morbidities

- Anemia
- Blood pressure
- Diabetes
- Fluid Status
- Gout
- Lipids
- Acidosis
- Phosphates
- Uremia Symptoms
- Infections
Focus on Health Promotion

- Nutrition
- Exercise / weight control
- Risk reduction of cardiovascular risk factors
- Mental health
Nursing Framework of Care

Management of CAN

Stage 3
Evaluating & Treating Complications

Stage 4
Preparation for Renal Replacement Therapy

Stage 5
Bridge to Renal Replacement Therapy
Stage 4: GFR 15-29 (ml/min/1.73m²)

Preparation for Renal Replacement Therapy

- Pamphlet “When My Transplant is Failing”
- Referrals
  - CKD Clinic
  - Re-Transplant Assessment
  - Referral for Peritoneal/Vascular Access
- Ongoing Follow-up in Transplant Clinic
Patient Tool (Pamphlet)

Pamphlet “When My Transplant is Failing”

- Reviews concept of GFR
- Dietary adjustments
- Uremic symptoms
- Access information
- CKD clinic visit overview
- Emphasis on healthy lifestyles
- What happens next?
Referrals

Chronic Kidney Disease Clinic

- Referral form – communication!
- Dialysis anticipated within one year
- Group learning session
  - treatment options, access creation
- Nutrition and Social Work consultations
  - adjustment issues, coping strategies
- Debriefing with patient at next Transplant Clinic visit
Referrals

Re-transplant Assessment

- Emphasis on live donation
  - Genetic
  - Emotional
  - LAD (currently a BCTS pilot study)

- Maintain records of ongoing assessment and communication with transplant clinic
Referrals

Peritoneal or Vascular Access

- Patient teaching pre and immediately post surgery
- Ongoing assessment by referring clinic
On-going Follow-up in the Transplant Clinic

- Increased frequency of clinic visits
  - managing co-morbid diseases and immunosuppression
- Increase nutrition and social work involvement
- Education to allow for informed choice of treatment modalities
- Viral serology testing / vaccinations
- Kidney Foundation of Canada manual/newsletter
Nursing Framework of Care

Management of CAN

Stage 3
Evaluating & Treating Complications

Stage 4
Preparation for Renal Replacement Therapy

Stage 5
Bridge to Renal Replacement Therapy
Stage 5: GFR <15 (ml/min/1.73m²)

Bridge the Gap to Renal Replacement Therapy

- Communication
- Re-referral to CKD
- Tour
- Dialysis
- Nursing follow-up
Communication

- Letter to family practitioner to inform of patient’s changing status
- Initiate nursing referral to be sent to next treatment modality
- Nutrition and social work summaries
Tour

- Tour of hemodialysis unit or PD training area
- Introduce to staff in the respective areas
- Give list of new contacts
- Co-ordinate planning of timely initiation of dialysis
Dialysis

- Accompany patient for initial dialysis when possible

- Transplant Clinic continues to monitor immunosuppressant medications until discontinued and/or transplant nephrectomy

- Transplant clinic supports patient according to transplant centre’s recommendations for adjustment of immunosuppressants and/or removal of transplant kidney
Nursing Follow-up

- Visit patient while on dialysis, phone call or card
- Allows for closure of the patient / transplant nurse relationship
Patient Tool (Pamphlet)

“When My Transplant Kidney is Failing”

- Developed by BCTS Regional Transplant Nurses
- Will be printed by Roche

Email us (on behalf of BCTS Regional Nurses) at:
- shauna.granger@interiorhealth.ca
- katy.burke@interiorhealth.ca
Nursing Tools

- **Forms**
  - Referral to CKD Clinic
  - Referral to Dialysis

- **Letter** to Family Practitioner
Thank You

The Regional Transplant Clinic nurses (who are an awesome group.)

- BCTS Director of Ambulatory Services / Sandra Vojnovic
- Regional Nephrologists
- BCTS Nephrologists