THE ROLE OF THE HEPATOLOGY NURSE - TOWARDS CARE FOR END STAGE LIVER DISEASE

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Cirrhosis is the end stage of advanced liver disease.

- Number of patients with cirrhosis expected to increase over next 10-15 years.

- Monitoring for complications is essential to reduce disease burden for patient and healthcare system.
CLINICAL PRACTICE GUIDELINES

No New Zealand Guidelines
Need to develop national clinical practice guidelines

- American Association for the Study of Liver Diseases (AASLD)
- European Association for the Study of the Liver (EASL)
- National Institute for health and Care Excellence (NICE)
TREATMENT OF UNDERLYING CAUSE

• Fibrosis regression in patients who have cleared hepatitis C or in Autoimmune Hepatitis been treated with immunosuppressive therapy

• Alcohol cessation improves histological features of cirrhosis

• 3-5% weight reduction in NASH can reduce steatosis
HCC SCREENING: NEED TO DISCUSS NATIONAL MANAGEMENT GUIDELINES

• Regular screening enables early detection & potentially curative treatment

• Higher rates of detection & curative treatment observed in patients enrolled in surveillance screening

• AASLD, EASL & NICE all recommend USS surveillance for HCC every 6 months

• Monitor AFP every 6 months?
Nurse led HCC surveillance clinic showed improved monitoring for HCC and decompensation (Nazareth et al., 2016)
OESOPHAGEAL VARICES

Varices present in 50% patients with cirrhosis (Garcia-Tsao, Sanyal, Grace, & Carey, 2007).

- Major cause of morbidity and mortality
- Early detection allows for prophylactic banding
- AASLD (2017) & NICE (2016) recommended endoscopy at diagnosis
Introduction of a nurse coordinator translated into improved and sustained adherence to guidelines for the prevention of oesophageal haemorrhage
(Wundke, Altus, Sandford & Wigg (2010))
Hepatitis A & B Immune Status

- Vaccination eliminates risk of further injury to the liver
- Acute hepatitis can be life threatening

- Hepatitis A vaccination recommended but not funded unless listed for liver transplantation
- Hepatitis B vaccination recommended and funded for patients with hepatitis C but not other conditions unless listed for transplantation
PROGRESSION OF CIRRHOSIS

- Physical assessment and interpretation of laboratory results every 6 months helps to assess disease severity and progression

- Opportunity to discuss alcohol cessation, nutrition, medications

- AASLD (2014) and NICE (2016) – assess patient 6 monthly for signs of decompensation
- EASL (2016) – use MELD score to monitor change as required
Abstinence prolongs survival

- EASL (2012) recommends AUDIT tool to routinely assess alcohol consumption
- AASLD (2010) – abstinence needs to be continually reinforced
FACTORS AFFECTING OUTCOME FOR PATIENTS WITH CIRRHOSIS

- Clinical Practice Guidelines
- Decision support tools
- Patient Involvement/Self Management
- Care coordination
- Advanced nursing roles
Hepatitis Clinical Nurse Specialists are well qualified to coordinate assessment and monitoring of patients with cirrhosis.

Less intensive hepatitis C treatments allow for expansion of our roles.

Increased numbers with cirrhosis demonstrate a need for expansion of our role.
ADVANTAGES

- Continuity of care
- Increased accessibility to health professional
- Opportunities for patient education including self-management
- Increased patient adherence
- Reduced workload for medical staff
- Reduced admissions for complications
CHALLENGES

- Need to develop lines of responsibility
- Develop algorithms for all complications of cirrhosis
- Start with stable compensated patients
- Encourage & support post graduate study
- Develop/adopt a competence framework for nurses
EXAMPLE: ASCITES MANAGEMENT

- Encourage self-monitoring of weight
- Nutritional support/management
  - Low salt, high protein, high energy
  - High protein snacks
  - Small frequent snacks
  - Dietary supplements
EXAMPLE OF VARICEAL SURVEILLANCE ALGORITHM (UK GUIDELINES TRIPATHI ET AL., 2015)

Diagram:
- Diagnosis of cirrhosis
  - Endoscopy
    - No varices
      - Re-endoscope 2-3 years*
    - Grade I varices
      - Re-endoscope 1 year*
    - Grade II or III varices (or any varices with red signs)
      - Non cardio-selective beta-blocker
        - Intolerant/contraindications to non cardio-selective beta-blocker or patient choice: Variceal band ligation
## HEPATIC ENCEPHALOPATHY MONITORING

- Dysfunctional sleep patterns

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<th>Severity</th>
<th>Points</th>
<th>Description</th>
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<td>None</td>
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<tr>
<td>Grade 1</td>
<td>2</td>
<td>Mild confusion, asterixis</td>
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<tr>
<td>Grade 11</td>
<td>2</td>
<td>Drowsy asterixis</td>
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<tr>
<td>Grade 111</td>
<td>3</td>
<td>Marked confusion, somnolence, asterixis</td>
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<tr>
<td>Grade IV</td>
<td>3</td>
<td>Responsive to painful stimuli, asterixis</td>
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NZ GE Specialists per capita ratio is 1.93 / 100,000
  - Scotland per capita ratio is 2.34 / 100,000
  - Australia per capita ratio is 3 / 100,000

The NZ GE 42% workforce is likely to retire in the next 10 years

There is substantial regional, socio-economic and ethnic inequalities in access to GE treatment

Hepatitis C Specialist Nurses are well placed to expand practice into all hepatology
REGULAR SURVEILLANCE A PREDICTOR OF SURVIVAL

- Opportunity for nurses to manage screening; increasing adherence resulting in improved patient outcomes and need for palliative care
- HCC rates increasing
- In the NZ setting under diagnosis of HCV and HBV
- Lack of diagnosis of cirrhosis
- Lack of monitoring of HBV
  - Ed Gane’s LTU data
  - Cameron Schauer ‘Surveillance factors change outcomes in patients with HCC’
  - Thomas Mules ‘HBV related HCC presenting at a late stage’
WHAT IS NEEDED

- New Zealand Guidelines for the Management of patients with Liver cirrhosis
- NZ Clinical Pathways
- Standardised care across New Zealand to ensure equity of access to care
- Gastro Society webpage
NURSING RESOURCES

• NICE GUIDELINES and pathways: Baseline assessment tool for cirrhosis in over 16’s
• RNC Competencies: Caring for people with liver disease: a competence framework for nursing
• AHA Practice Standards for the Hepatology Nurse
• Management of Hepatic Encephalopathy
  • www.hepaticencephalopathy.co.au