

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

Judith McLaughlin
Clinical Nurse Specialist
Christchurch Hospital

Margaret Fraser
Clinical Nurse Specialist
Dunedin Hospital

- 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

ALCOHOL ASSESSMENT

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**

MANAGEMENT OF PATIENTS WITH ADVANCED LIVER DISEASE

- 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

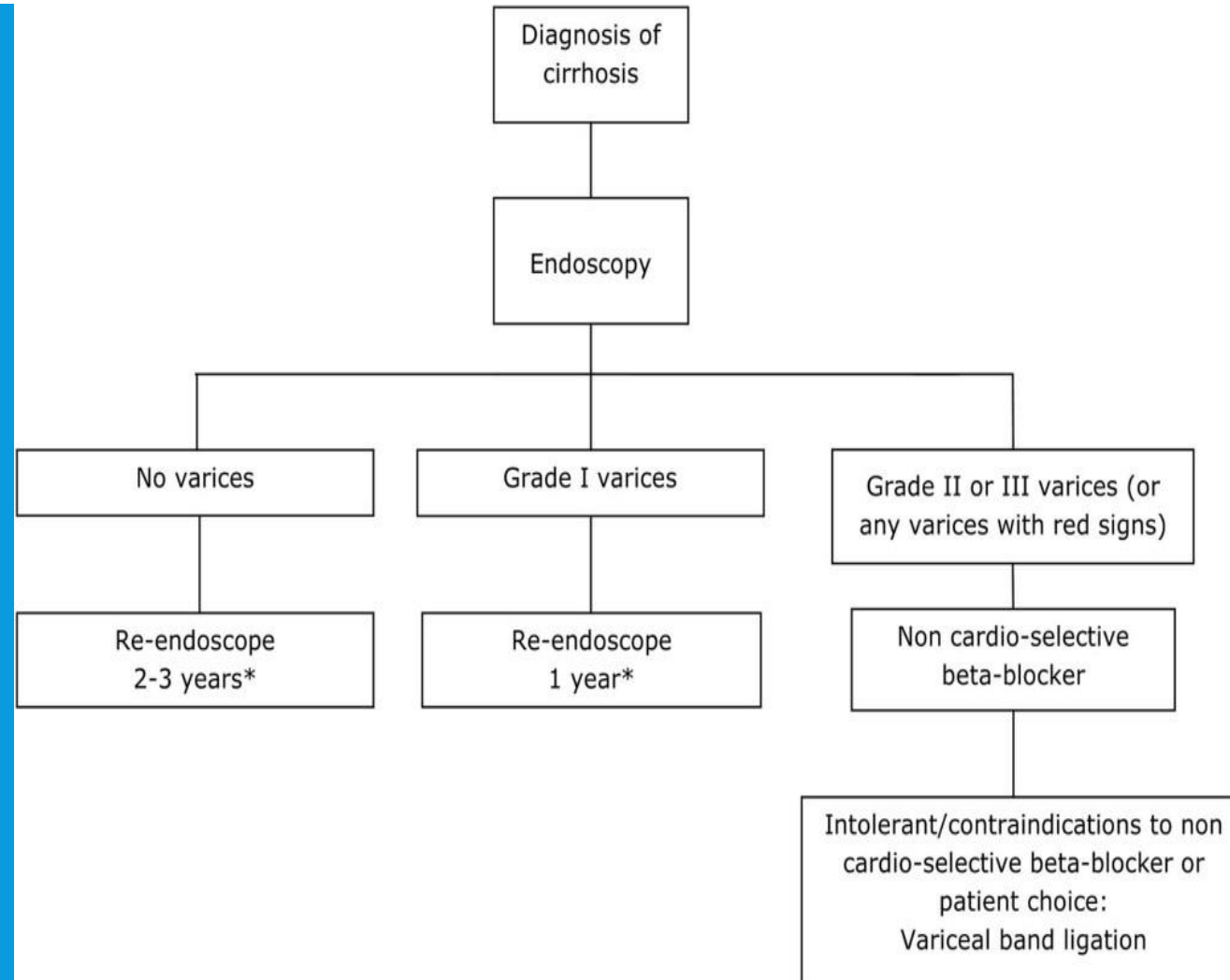
Encourage & support post graduate study

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)



HEPATIC ENCEPHALOPATHY MONITORING

- Dysfunctional sleep patterns

▪ Severity	Points	Description
▪ None	1	None
▪ Grade 1	2	Mild confusion asterixis
▪ Grade 11	2	Drowsy asterixis
▪ Grade 111	3	Marked confusion, somnolence, asterixis
▪ Grade IV	3	Responsive to painful stimuli, asterixis

GASTROENTEROLOGY SPECIALIST WORKFORCE IN NZ CHALLENGES AND SOLUTIONS

- 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