How do the KDIGO Clinical Practice Guidelines on Hepatitis C in chronic kidney disease apply to UK renal units?

Dr. Robert Mactier, Chairman, RA Clinical Practice Guidelines Committee
Dr. Colin Geddes, Lead author, RA module on blood borne viruses in the renal unit

Introduction

This report summarises the relevance and utility of the recently published, global KDIGO Clinical Practice Guidelines for the prevention, diagnosis, evaluation, and treatment of Hepatitis C in chronic kidney disease within the UK (Kidney Int. 2008; 73 (Suppl 109); S1-S99). A national clinical guideline on the management of Hepatitis C was also published recently by the Scottish Intercollegiate Guidelines Network (SIGN) (Guideline 92, December 2006 available at www.sign.ac.uk). The prevalence of HCV infection worldwide is reported to be 3% of the general population but it is much higher in patients with CKD, especially in many parts of the developing world. More than 20% of HD patients in some countries in the Far East are infected with HCV whilst the prevalence of HCV infection in HD patients in the UK has been estimated as 3%.

The strengths and weaknesses of the KDIGO guidelines on Hepatitis C in CKD within the UK clinical setting are outlined below.

Guideline 1: Detection and evaluation of HCV in CKD

The guidelines 1.1 and 1.2 (in particular the strong recommendations) in this document reflect common practice in UK renal units.

Guideline 2: Treatment of HCV infection in patients with CKD

All but one of the 13 recommendations for treatment are weak and are too specific to be relevant to nephrologists in the UK where all decisions regarding antiviral treatment in CKD patients would be made by specialists in infectious diseases or hepatology. Guideline 2.3.3 is a strong recommendation advocating follow up of patients with HCV infection for HCV-associated co-morbidities which many clinicians would consider self evident and non-specific good medical practice.

Guideline 3: Preventing HCV transmission in haemodialysis units

The evidence for guidelines 3.1 and 3.2 are weak or moderate but the guidelines are useful and very relevant in providing pragmatic advice to HD units in the UK.

Guideline 4: Management of HCV-infected patients before and after transplantation

Guideline 4.1: Evaluation and management of kidney transplant candidates regarding HCV infection
The strong (4.1.1) and moderate (4.1.2) recommendations on evaluation of the potential transplant recipient for HCV infection are routine practice in the UK. The 4 weak recommendations (4.1.3 – 4.1.6) which consider investigation and treatment of patients with evidence of liver disease are more relevant to hepatologists than nephrologists. Routine application of these weak recommendations may delay patients getting on the deceased donor waiting register for a renal transplant, which is an important consideration for most patients and nephrologists.

**Guideline 4.2: Use of Kidneys from HCV-infected donors**

This guideline is current practice in the UK

**Guidelines 4.3 and 4.4**

All of the individual 6 recommendations are weak and add very little to intuitive good medical practice in renal transplantation.

**Guideline 5: Diagnosis and management of kidney disease associated with HCV infection**

The guidelines 5.1 – 5.3 are weak recommendations but reflect good medical practice in the investigation of CKD in HCV-infected patients in the UK. Emphasis should be placed on restricting the investigation of HCV-infected patients to the subgroup of patients with evidence of clinically significant renal disease.

**Omitted Guidelines:**

The KDIGO Clinical Practice Guidelines for the prevention, diagnosis, evaluation, and treatment of Hepatitis C in chronic kidney disease are described in great detail over 107 pages but several issues have not been addressed as specific guidance for the renal multidisciplinary community. The Renal Association would envisage including further guidance on the following issues in clinical practice guidelines for the UK:

1. **There is no guidance on the need for testing of healthcare workers in renal units for HCV infection.** It is important that healthcare workers who are HCV RNA positive should not perform invasive (exposure prone) procedures. Conversely members of clinical staff in the UK have developed HCV-infection from a needle-stick injury.

2. **There is no guidance that patients with HCV infection should be referred promptly to specialist care.**

3. **There is no specific guideline or recommendation re the cleaning and disinfection of the HD machine between patient treatments** although Guideline 3.1 recommends that HCV-infected patients do not need to be isolated nor do they need to use a dedicated machine. Table 19 on page 48 describes the hygienic precautions required for HD machines used for HCV-infected patients and this could be incorporated into a recommendation within the guidelines.
Summary

Guidelines 1 and 3 (and perhaps 5) and subsections 4.1.1, 4.1.2 and 4.2 are the most likely to be endorsed and supported by renal units in the UK.

Acknowledgement

This report on the utility and predicted implementation of the KDIGO hepatitis C guideline within the UK has been reported to KDIGO and the authors of the KDIGO hepatitis C guideline. KDIGO has requested that this feedback should be made available on the Renal Association’s website.

References

KDIGO Clinical Practice Guidelines for the prevention, diagnosis, evaluation, and treatment of Hepatitis C in chronic kidney disease within the UK. Kidney Int. 2008; 73 (Suppl 109); S1-S99

Scottish Intercollegiate Guidelines Network (SIGN) Guideline 92, Hepatitis C, December 2006 available at www.sign.ac.uk