Appropriate Use of Oral Nutritional Supplements in Stages 4-5 Chronic Kidney Disease

A Consensus Statement for Dietitians and other Healthcare Practitioners

Implementation strategies for using oral nutritional supplements (ONS) in patients with stages 4-5 chronic kidney disease (CKD) are lacking in the UK and current international recommendations are not tailored to the dietetic-led nutrition services prominent in the UK.

A recent meeting of the Renal Nutrition Group (RNG) of the British Dietetic Association (BDA) identified a need for clarity on the use of ONS in these patients and as a result a group of seven renal dietitians, together with a general practitioner, met to discuss and reach agreement on a simple step-by-step consensus algorithm to guide the appropriate use of ONS in patients with stages 4-5 CKD.

The consensus group was chaired and facilitated by Helen MacLaughlin from King’s College Hospital. Participants were Harriet Williams, Chair of the RNG and based at Bangor Hospital; Jan Flint, Royal Free Hospital; Karen Magee, Belfast City Hospital; Kevin Jesty, Royal Berkshire Hospital; Lakshmi Chandrasekharan, Southend University Hospital; Dr Rob Hicks, GP locum and broadcaster; Ruth Kander, Imperial College Healthcare.

Introduction

Nutrition plays a key role in the management of patients with CKD and undernutrition can be a frequent complication. Even though undernutrition is seen in 20% - 50% of patients depending on the stage of CKD, there is still a lack of understanding and confusion about screening and diagnosis.

The ‘MUST’ (Malnutrition Universal Screening Tool) is not renal specific and is not appropriate for patients with stage 4-5 CKD where weight loss may be masked by fluid gain. The SGA (Subjective Global Assessment) and ASPEN (American Society for Parenteral and Enteral Nutrition) / AND (Academy of Nutrition and Dietetics) methodology assess nutritional status rather than screen for nutritional risk.

Undernutrition is associated with poor outcomes for patients with stages 4-5 CKD and current evidence supports the use of nutritional interventions in these patients. While there is good evidence that ONS can improve nutritional deficits in patients with stage 4-5 CKD there is a lack of guidance on which classes of products are most suitable and when to use them. Helen MacLaughlin, Renal Dietitian and Chair of the consensus group, said:

“There are many current evidence-based guidelines for nutrition in CKD, which can be conflicting. Meeting energy and protein requirements whilst keeping serum electrolyte levels safe is the principle aim of dietary intervention, and using ONS can be helpful to achieve this aim.”

In addition, different definitions and terminologies can complicate assessment of the problem of undernutrition (Box 1, see page 36).

A consensus statement for ONS in stage 4-5 CKD

Taken together, the issues outlined above suggest a need for clear and simple recommendations on the use of ONS in advanced CKD. This need was identified by the RNG of the BDA and, as a result, a consensus meeting was held to discuss and agree an algorithm – not just for renal dietitians, but for the whole of the multi-disciplinary team (MDT). The consensus guide featured on the next two pages is designed to be a practical tool for implementing best-practice nutritional support for these patients, including when and how to use ONS. The guide can be downloaded from https://www.abbottnutrition.co.uk/support-and-tools/articles/improved-nutritional-management-for-ckd-patients-now-a-step-closer—new-best-practice-consensus-guide.
Box 1: Terminology and definitions

Protein Energy Wasting (PEW): Describes conditions with elements of inflammation where, for example, intake might be sufficient but weight loss is problematic. The International Society of Renal Nutrition and Metabolism (ISRN) expert panel has defined PEW as a ‘state of decreased body stores of protein and energy fuels (body protein and fat masses).’

Malnutrition: There is no universally accepted definition of malnutrition and it can cover both under- and overnutrition. NICE states that malnutrition is a ‘state in which a deficiency of nutrients such as energy, protein, vitamins and minerals causes measurable adverse effects on body composition, function or clinical outcome.’

Undernutrition: In the algorithm, the term undernutrition has been used to describe any situation in which there is insufficient energy intake.
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Summary

The consensus statement was developed in response to a need identified by the RING of the BDA and is intended for use by all dietitians, as well as other members of the MDT. It provides clear recommendations on when to use ONS in stages 4-5 CKD, the suitability of different products and appropriate monitoring.

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References


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