Summery

Malnutrition is common in end-stage renal disease (ESRD) patients on maintenance hemodialysis (HD) with prevalence in predialysis ranging from 20% to 80%.

Malnutrition increases morbidity and mortality and significantly affects quality of life. In recent years, much progress has been made in identifying the causes and the pathogenesis of malnutrition in patients on HD as well as in recognizing the link among malnutrition, inflammation, and mortality.

The pathogenesis of malnutrition in patients on HD is multifactorial and secondary essentially to predialysis restrictive diets, inadequate nutritional intake due to anorexia, gastropathy and enteropathy, inflammation and/or infection, medications, psychosocial factors ,dialysis-related factors (inadequate Kt/V, postdialysis fatigue, cardiovascular instability), dialysis-related nutrient losses, alterations in protein metabolism, metabolic acidosis, and inflammation.

Protein-energy malnutrition (PEM) is common among patients with chronic kidney disease (CKD stages 4 and 5) and is associated with an increased risk of morbidity and mortality.

Hemodialysis (HD) patients frequently develop gastrointestinal complaints. HP is considered one of the causal factors for these dyspeptic symptoms. the presence of HP infection should be sought and its eradication mandatory for this patient population**.**

Hepatitis C virus (HCV) infection is an important problem in hemodialysis (HD) patients**.** HCV infection has also been studied as a source of increased oxidative stress both in the normal and dialysis populations**.** Although oxidative stress is one of the possible causes of inflammation in patients with end stage renal disease**.**

Patients with chronic renal failure undergoing vascular surgery are associated with increased risk for postoperative malnutrition and may be a group to target for peri operative risk factor modification and nutritional supplementation.

Nutritional status should be assessed with a combination of valid, complementary measures rather than any single measure alone. These measures include dietary intake assessment, anthropometry, serum proteins and cholesterol, urea and creatinine kinetics, subjective global assessment, and body composition measurements.

The nutritional approach to HD patients should be dynamic in nature and continuously adapted to the changing metabolic and nutritional needs of every single patient throughout his or her dialytic history.

Although nutritional screening, dietary counseling, and dialytic adequacy have a critical role in malnutrition prevention, other measures, such as pharmacological intervention, acidosis correction, artificial nutrition, or oral supplement administration may be effective in both preventing or correcting malnutrition, depending on the phase at which they are used. However, increasing the awareness of physicians about the nutritional risk of HD patients still appears to be the most valuable tool for preventing the onset of deterioration of nutritional status**.**

Disease self-management, described as the daily decisions and activities individuals perform to live with and control illness .The Dietary Intake Monitoring Application (DIMA) is an electronic dietary self monitor developed for use on a personal digital assistant (PDA), and how computer, information, numerical, and visual literacy were considered in development of DIMA.