This book has brought out some extensive reviews on brain, stroke and kidney contributed by experts from the areas of nephrology as well as neurology. The 13 chapters included here throw light on the not so well studied cerebrorenal interactions.

The introductory Chapter, “Cerebrorenal Interaction and Stroke” explains the important association between chronic kidney disease (CKD), cardiovascular disease (CVD) and cerebrovascular disease. Following introduction of the term “Cardiorenal interaction” about a decade ago, the author suggests to introduce the term “Cerebrorenal interactions” on the same lines, so that, similar beneficial outcome might ensue, and result in better management of the stroke and renal disease. The author also stresses on the important role of traditional and non-traditional risk factors in causing high incidence of cardiovascular disease in CKD.

The second Chapter, “Inhibition of the Renin-Angiotensin-Aldosterone System for cerebrorenal protection” is a comprehensive write-up on the role of Renin-Angiotensin-Aldosterone System (RAAS) in hypertension and cerebral system, and the role of RAAS blockade in the treatment and prevention of stroke. Hypertension is seen in over 50-75 per cent patients with CKD and contributes to progression of the disease to end stage renal disease, cardiovascular disease and stroke.

In the third chapter, “Obesity and Heart Failure as a Mediator of the Cerebrorenal Interaction”, the authors have brought out the importance of obesity in causing stroke and CKD. Obesity is increasing in prevalence all over the world. It is becoming a substantial burden to cardiovascular disease including heart failure. Obesity is a pro-oxidative/pro-inflammatory state causing alterations in fatty acids, lipids and glucose metabolism that influence myocardial function and progression of heart failure from diastolic to systolic failure. Progressive cardiac failure is known to be associated with progressive CKD, cardiorenal syndrome and cerebrovascular disease, including stroke. Whether the risk is direct or a confluence of risk factors is unknown.

In the fourth chapter, “Subclinical Cerebral Abnormalities in Chronic Kidney Disease” the following were discussed. The prevalence of CKD in the elderly persons aged 64 yr or older varied from 23.4 to 35.8 per cent. Microalbuminuria and low GFR were strongly associated with incident stroke risk. CKD is an independent risk factor for cognitive impairment, dementia and vascular cognitive impairment. Age, hypertension and diabetes mellitus are independently associated with both subclinical lacunar infarction and white matter lesions. These classic vascular risk factors are also predictors for CKD.

The next chapter “Carotid Atherosclerosis in Kidney Disease” is informative. In the prospective follow up studies on general population, CKD has become a major public health problem and a risk factor for all-cause mortality, cardiovascular disease and its subtypes such as stroke and myocardial infarction.

The sixth chapter “Kidney Disease and Cognitive Function”, is an elaborate article, that has brought out several observations in relation to the cognitive dysfunction secondary to kidney disease, such as, CKD as a risk factor for dementia and cognitive decline (global and multiple specific-cognitive defects), cognitive impairment as a risk factor for dialysis related monitoring. Other notable observations
include, “Indirect risk factor model” where cognitive dysfunction could be secondary to kidney disease and “In parallel risk factor model” where both kidney and brain are exposed simultaneously to common risk factors. The candidate mechanisms mediating the kidney disease and cognitive dysfunction such as CVD risk factors, intrinsic biological factors, psychosocial factors and dialysis have also been discussed.

The seventh chapter discusses the “Risk of Stroke in Kidney Disease”. Based on the analysis from community based longitudinal studies, it has been observed that subjects with eGFR, 60ml/min/m² had a higher incidence of stroke at 10.3 events per 1,000 person years than those with eGFR above 60ml/min/m². Stroke is quite common in dialysis patients. The risk of stroke in these patients has been found to be 4-10 times higher than that in general population.

In the chapter on “Role of 24-hour Blood Pressure Management in Preventing Kidney Disease and Stroke”, ambulatory BP monitoring (ABPM) is shown to provide a better predictive value for cardiovascular events than clinical BP measurements. Ambulatory BP has a closer correlation with target organ damage including kidney dysfunction and silent cerebral vascular disease.

The chapter on “Preventing Stroke and Systemic Embolism in Renal Patients with Atrial Fibrillation: Focus on Anticoagulation”, the chapter brings out many important observations including the higher incidence of atrial fibrillation(AF) in CKD patients over general population, importance of CHA2DS2-VASc score for risk of stroke in non-valvular AF and HAS-BLED score for bleeding risk. The disadvantages of Warfarin in CKD have also been discussed.

The tenth chapter, “Stroke Features and Management in Patients with Chronic Kidney Disease”, is an interesting write-up, explaining the effects of albuminuria and reduced eGFR on stroke, complications and outcome.

The chapter entitled “Stroke Feature and Management in Dialysis Patients” brings out many key findings including, (i) the role of non-conventional and dialysis-related risk factors in the incidence of stroke in dialysis population, (ii) guidelines for the management of stroke patients on dialysis with reference to cerebral bleed and cerebral infarction, (iii) importance of blood pressure control in primary prevention of stroke and AF and malnutrition in secondary prevention, and (iv) significance of Stroke sequelae and socioeconomic support in dialysis patients.

In the twelfth chapter, “Thrombolysis and Hyperacute Reperfusion Therapy for Stroke in Renal Patients”, the author stresses on the role of thrombolytic therapy with IV rt-PA. Limitations of neuroendovascular reperfusion therapies in catheter based intra arterial therapies Mechanical thrombectomy such as IV contrast injury and more symptomatic ICH occurrence as a complication are also dealt with.

Overall, this book explains how CKD is complicated by cardio- and cerebrovascular diseases, contributing further to morbidity and mortality. The basics and clinical aspects being substantiated with existing relevant literature, and management aspects are succinctly dealt with. This publication will be accepted as a valuable collection in every medical library, to enhance the understanding and for safe and effective management of CKD.

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The First International Conference on Nutrition and Growth was held in Paris in March 2012. The purpose of this conference was to bring together experts involved in studies on growth and development of children including paediatricians, neonatologists and nutritionists. Over 40 overview lectures on a wide variety of topics ranging from cellular and molecular mechanisms of growth, infant and young child feeding practices and their impact on growth, implementation of WHO growth charts for monitoring growth, health problems associated with poor growth in developed countries, factors responsible for growth faltering in
developing countries, outcome measures for assessment of nutrition and growth, use of biomarkers and clinical outcome measures in research studies on nutrition and growth, were presented. World review of Nutrition and Dietetics has now brought out this supplement containing compilation of 27 overview presentations made in the conference.

The articles cover a wide range of clinical outcomes of early growth and development from varying perspectives- of that of a clinician, an endocrinologist and an epidemiologist. The set of articles dealing with early nutrition and later outcome in preterm infants, bone mineral accretion and its relationship to skeletal growth, sexual maturation and body composition, prenatal influence on skeletal development, prematurity and bone growth, role of insulin-like growth factor on nutrition, growth and development provide a wealth of information on these relatively not-so well-understood areas. For the clinicians from India and other developing countries, the articles on lessons learnt from clinical studies on infant nutrition, advances in growth chart design, implementation of the WHO child growth standards, nutritional catch up growth, cellular and molecular mechanisms of catch up growth provide an overview of these important areas. Gastrointestinal problems resulting in altered growth are increasingly being seen both in developed as well as developing countries. Articles on nutrition and growth in inflammatory bowel diseases, pathophysiology and management of abnormal growth in children with chronic inflammatory bowel disease are likely to be of interest to clinicians globally.

In the current century the dual nutrition burden in childhood has emerged as a major public health problem among the affluent and the poor in countries across the world. Therefore, the articles on early diet and adiposity; early diet, insulin-like growth factor-1, growth and later obesity; growth trajectories associated with adult obesity; early growth and later atherosclerosis; obesity prevention in children, etc. are of universal interest to clinicians working in all settings. Articles providing a concise overview of the topic and areas where research studies are needed are of use for research scientists from different disciplines - paediatricians, epidemiologists, nutrition scientists. Author and subject index provided at the end are useful. Overall, this book will be a useful addition to libraries in medical colleges and research institutions.

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