This is something even highly talented junior contributors rarely do well. Not surprisingly, a number of the chapters are in the unrefined stage. Authorship is skewed very much to the neurology camp – only two of the listed contributors have an affiliation with a division, department, or institute of geriatrics/gerontology. An overly broad target audience ("*all* <my emphasis> physicians, psychologists, medical students and others" , p. xv) is proposed.

The 38 chapters are divided into four sections. The introductory section has chapters on age-associated cognitive changes, an overly terse (it is only a bit over three pages in length) overview of the neurological examination, and a substantially longer review of select diagnostic tests (neuroimaging, EEG, EMG). A chapter on pharmacotherapy is a welcome addition but one on the neurological concerns of postmenopausal women is more germane to middle-aged women rather than the elderly. The discussion on the relative benefits of postmenopausal HRT (p. 52-53) is overstated (Lancet 2002, 360:942; JAMA2002, 288:872).

The second section deals with the common neurological signs and symptoms encountered in older patients. I question including a chapter on "Back and Neck Pain" and I would have split into two the chapter on incontinence and sexual dysfunction. The third section covers specific neurological conditions. There is duplication between the second and third sections. Some of the chapters in this section have a tangential relationship with geriatric neurology (e.g., the four chapters dealing with the neurological manifestations of systemic diseases). The last section on psychosocial issues is a potpourri of five wide-ranging topics.

Some of included information is either dated (e.g., HRT), debatable (the numerous algorithms for assessment/management found throughout the book, e.g., the treatment algorithm for cognitive dysfunction after head trauma, p. 254), incorrect (e.g., statement that donepezil has an AE profile similar to tacrine, p. 40), or incomplete (e.g., discussion of vascular dementia, p. 234; no mention of analgesic/ergot overuse or temporomandibular disorders, chapter 14 on headaches). The production values are generally good though I was surprised that a number of the demonstration pictures in chapter 12 (Neuro-Ophthalmology) are of young/middle-aged adults and a number of spelling errors (e.g., page 325 "biphosphonates" in figure 24.1) are present.

As my bottom line, I cannot recommend this book for the reasons noted above.

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VITAMIN RESPONSIVE CONDITIONS IN PAEDIATRIC NEUROLOGY. 2002. Edited by Peter Baxter. Published by Cambridge University Press. 181 pages. C$128.00 approx.

This book is valuable because it emphasizes vitamin deficiencies in infants and children which are treatable if they are diagnosed promptly and treated appropriately. Thus the first chapter deals with biotinidase deficiency, which is an autosomal recessive disorder with complex changes in the metabolism of four carboxylases treatable with biotin, a member of the B vitamin group. In the second chapter, the role of maternal vitamin supplementation in the prevention of neural tube defects and some childhood brain tumors is discussed. Most guidelines recommend maternal periconceptional folate supplementation at 0.2-0.5 mg/day but various other factors have to be considered.

In the third chapter, vitamins and minerals are discussed in relation to autism. Mary Coleman, of Washington, D.C., finds that no vitamin deficiency is clearly established in autism, and not all studies agree that vitamin B6 is helpful.

The fourth chapter deals with homocystinuria due to cystathionine β-synthase deficiency. This is the most common type of inherited homocystinuria, and about one-half of the patients respond to pharmacological doses of pyridoxine (vitamin B6).

The fifth chapter describes riboflavin-responsive disorders. Riboflavin (also known as vitamin B2) is a precursor of two flavin co-enzymes which are essential co-factors in various electron transfer reactions. Major clinical phenotypes of deficiencies are described.

The sixth chapter deals with folinic acid responsive seizures. This response was discovered almost accidentally by spinal fluid investigation of infants with seizures. Folinic acid is a reduced derivative of folic acid but its mechanism of action is still unknown.

The seventh chapter deals with vitamin treatment in mitochondrial cytopathies. The spectrum of diseases attributable to primary disorders of mitochondrial DNA (mt DNA) keeps increasing, and there is some hope of effective gene therapy becoming available.

The eighth chapter deals with vitamin E responsive conditions. Vitamin E is a term for a number of related chemical compounds termed tocopherols and tocotrienols. The best-known biological activity of vitamin E is anti-oxidant function protecting molecules from damage by reactive oxygen, inflammation and cytochrome P450. Its anti-oxidant defences and the clinical effects of vitamin E deficiency are described in detail.

In the ninth chapter, cobalamin and folate-responsive disorders are described. Cobalamin is a water-soluble vitamin consisting of a corrin ring with side chain components bound to a central cobalt atom. Cobalamins with vitamin B12 activity include two co-enzyme forms, and the redox state of cobalt atoms is variable. The absorption and metabolism and binding by intrinsic factors are described as well as folate absorption and metabolism and the autosomal recessive inborn errors and remethylation defects.

In the tenth chapter the Editor discusses pyridoxine-dependent and pyridoxine-responsive seizures. He notes that these were first described in 1954 when a girl began twitching at three hours of age and her seizures responded only to intramuscular multivitamins. After withdrawal of the vitamins the seizures recurred within 50 hours but were then controlled by pyridoxine at 2 mg/day. Dr. Baxter also describes the frequent antenatal intrauterine movements which have been noted in at least 15 of the 100 reported cases. An autosomal recessive inheritance has been suggested and a locus on chromosome 5 has been identified, but no gene has been localized.

The final chapter in Vitamin Responsive Conditions in Paediatric Neurology: a Clinical Approach, is also contributed by the Editor and should be read completely by child neurologists. He notes that, worldwide, the commonest vitamin deficiencies are still due to nutritional defect, while in countries without major childhood malnutrition, failures of absorption, transport mechanisms or metabolic pathways are now the main causes of vitamin-responsive conditions. He supplies an extensive list of treatable neurological disorders with nutritional or metabolic abnormalities in which developmental, learning and behaviour difficulties may supervene.

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