

circuitry and signaling in common neuropsychiatric syndromes, including schizophrenia, addictive disorders, anxiety, depression, bipolar disorder, and dementia.

Chapter 6 is of particular interest because many recent findings about the role of cAMP/protein kinase A/cAMP response element binding protein pathways and brain-derived neurotrophic factor signaling in depression and neurogenesis are summarized. The review of circuitry and signaling in anxiety disorders is also quite comprehensive. In particular, the neurobiology of fear and anxiety with an emphasis on the roles of the anterior thalamus and the lateral and central nucleus of the amygdala is well discussed. The latter structure plays a critical role by integrating the outputs and coordinating the autonomic and behavioral responses through interactions of other brain structures, including the locus caeruleus, paraventricular and lateral hypothalamus, hippocampus, and cerebral cortex. Neural circuitries and related signaling in panic disorder, posttraumatic stress disorder, and obsessive-compulsive disorder are also discussed extensively.

Although chapter 2 reviews many of the major signaling pathways in neuronal cells, proinflammatory cytokines such as interleukin-1, interleukin-6, tumor necrosis factor- α , and interferon-mediated signaling, surprisingly, are not discussed. A large body of evidence supports the hypothesis that cytokine-mediated signaling also plays an important role in certain psychiatric disorders, as evidenced, for example, by interferon- α -induced depression in the treatment of patients with hepatitis C. In addition, in chapter 8, the Alzheimer's disease section should probably be expanded to include areas such as signaling related to *N*-methyl-D-aspartic acid, oxidative stress, and nonsteroidal antiinflammatory drugs. Nevertheless, this book is worth reading for those who want to update their knowledge of the interface of two burgeoning research areas, neural circuitry and neuronal signaling.

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Neurobiology of Aggression: Understanding and Preventing Violence, edited by Mark P. Mattson. Totowa, N.J., Humana Press, 2003, 324 pp., \$125.00.

An 11-year-old brain-damaged boy in my clinic episodically attacked his mother. He described feeling remorseful afterwards and apologized, but the attacks increased in frequency. He had been bullied and exposed to media violence, and he described frightening hallucinations and depersonalization when he felt trapped and helpless. There had been some response to risperidone, albeit with akathisia, sedation, and weight gain.

This extensively referenced collection of comprehensive reviews by multiple contributors was helpful in thinking about my patient, with some exceptions. The book is to be commended for its broad coverage, ranging from theory to practice, from laboratory bench to barstool to swing set, from molecule to society and back. The contributors reveal that "aggression" is not unitary. Rat paradigms seem to correlate with abnormalities of specific neurotransmitters, brain regions, pathways, cells, and points in development. Human aggression is much more complex, involving personal history (especially of abuse and neglect) and decision-making pro-

cesses. Aggression can be seen as a normal phenomenon, as well as from the points of view of pathology, ethology, and evolution. Interpersonal conflict and ethnic riots generally have no single cause and occur in contexts. The media contribute, and "the United States, as the largest manufacturer and exporter...has an obligation to the 'global village' to provide more research" into its effects (p. 247).

A cognitive behavior therapy program addresses the attribution of one's own hostile intent to others. The notion of the "cognitive script,...a map of what will probably happen" (p. 277) would suggest the need for a separate chapter on memory, formally discussed only in the context of the dementias.

A few chapters reiterate the inadequacies of checklists, self-reports, and descriptive diagnostic schemes such as the DSM; there is no "gold standard definition" of aggression. No single deficit or gene corresponds directly to aggressive behavior. The few well-controlled drug studies show mixed results, with all-too-frequent iatrogenic exacerbation of aggression, perhaps from intolerable bodily feeling states. Research lags behind clinical practice.

The careful reader will be rewarded but will probably miss a final summary chapter or a dialogue among the contributors to help with integration. The field lacks a common research and clinical language and a seamless continuum from molecule to personality. It would be helpful to have more detailed illustrations, particularly of neurotransmitter pathways and limbic and frontal areas, and more detailed exposition on inositol and on the serotonin receptor subtypes, apparently particularly central to pharmacological approaches.

I would also like to have seen a chapter from the perspective of the individual's experience. Feeling unbearably guilty regarding the effect of his disability on his entire family, my patient would isolate himself in a tight space; then, hallucinating the devil attacking him, he would attack rather than be attacked. At times, however, the recalling of a loving family member would seem to abort an attack. Early psychoanalytic writers, who described the balancing of aggressive and libidinal drives and the importance of memory and the superego in different forms of aggression, continue to challenge researchers to match the complexity and usefulness of this early model.

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CHILD PSYCHIATRY

Pediatric Psychopharmacology: Principles and Practice, edited by Andrés Martin, Lawrence Scahill, Dennis S. Charney, and James F. Leckman. New York, Oxford University Press, 2002, 791 pp., \$129.95.

The ever-expanding field of psychopharmacology in child and adolescent psychiatry seems to be hungry for more books summarizing and categorizing new findings and developments. The latest arrival among such books is this imposing volume, an enormous editorial feat. Just a brief look at the list of 56 chapters authored by 117 experts would fill the reader with enthusiastic expectation to read the latest synopsis of

our knowledge and understanding of pediatric psychopharmacology.

The book is divided into four major sections. The first, *Biological Bases of Pediatric Psychopharmacology*, provides "a foundation of neurobiology upon which the rest of the volume is built." This section consists of three subsections—Developmental Principles of Neurobiology and Psychopharmacology, Genetic Principles, and Developmental Psychopathology. The second section, *Somatic Interventions*, reviews psychotropic agents used in pediatric psychopharmacology as well as other somatic treatments, such as complementary and alternative medicine approaches, ECT, and transcranial magnetic stimulation. The third section, *Assessment and Treatment*, begins with general principles such as clinical assessment, clinical instruments and scales, the psychology of prescribing, and combining pharmacotherapy and psychotherapy. It continues with a focus on treatment of specific disorders and syndromes and discussions of special clinical populations such as substance-abusing youth, individuals with mental retardation, medically ill children and adolescents, and preschoolers. The section closes with a focus on other areas of clinical concern such as aggression, agitation, and elimination disorders. The last section, *Epidemiological, Research, and Methodological Considerations*, reviews issues such as the methodology and design of clinical trials, regulatory issues, ethical issues in research, and international perspectives. An appendix titled *Pediatric Psychopharmacology at a Glance* provides a summary table of medications used in pediatric psychopharmacology.

The general approach to treating children and adolescents proposed in this book is developmental and integrative, which the editors point out is the legacy of the late Donald Cohen, to whom the book is dedicated. Psychopharmacology is not seen in vacuum but as "one (albeit a powerful one) among the many tools available for the treatment of psychiatrically ill children and adolescents." The book is well arranged, well organized, and easy to read (with the exception of the first section, which most of the clinicians who are a few years out of training may have to read with a lot of effort).

Any deficits? As with any volume of this scope, there are some. I understand that any book will be at least 2–3 years behind the current state of knowledge. Nevertheless, I missed some discussion and warning regarding the use of atypical antipsychotics and the possible development of diabetes mellitus. This is an important and troublesome issue in this population, and the first reports appeared almost 5 years ago. For obvious reasons, the latest controversy regarding selective serotonin reuptake inhibitors and suicidality could not be addressed either. There are occasional misquotes. I also think that the readers would welcome some specific guidelines or a brief outline for the treatment of each disorder at the end of each chapter on a specific disorder. Thus, my initial overenthusiasm was a bit tempered at the end of the day. Nevertheless, these small issues would be easily correctable in another edition and take away nothing from the usefulness and comprehensiveness of this excellent book. It is a well-edited, well-referenced, fairly user-friendly (in spite of its weight!), encyclopedic volume that will be appreciated by many in the field.

It would be a very useful and well-appreciated reference volume for anybody treating children and adolescents.

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From Child Sexual Abuse to Adult Sexual Risk: Trauma, Revictimization, and Intervention, edited by Linda J. Koenig, Ph.D., Lynda S. Doll, Ph.D., Ann O'Leary, Ph.D., and Willo Pequegnat, Ph.D. Washington, D.C., American Psychological Association, 2004, 346 pp., \$49.95.

From clinical forensic experience, I have found that individuals, especially females, who report sexual abuse as children are at higher risk for rape and other sexual assaults as adults. I have also found that most of the men whom I have examined who have been convicted of mass murder or as serial killers have a history of sexual abuse as children. Thus, child sexual abuse is a most important factor in the psychiatric history of patients who have been victimized and defendants who have been charged with violent crimes.

This book focuses not only on the clinical aspects of child sexual abuse but also on the research data supporting the finding that individuals who have been abused as children are at a higher risk for adult sexual assault or adult sexual behavior that may lead to sexually transmitted diseases, especially HIV.

It is no surprise to learn that three of the editors are with the Centers for Disease Control and that two of them specialize in research on HIV/AIDS. The fourth editor is with the Center for Mental Health Research on AIDS at the National Institute of Mental Health.

The book is divided into four sections. The first is an introduction asking the question about the link between child sexual abuse and adult sexual risk. This lays the foundation for the rest of the text. Section 2 develops the clinical aspects of child sexual abuse and adult sexual risk, including relationships, revictimization, and HIV. The authors discuss the implications for boys as well as girls who have been sexually abused.

Section 3 discusses the theoretical bases for adult risk in revictimization, including cognitive, social, and behavioral mediators. For example, several chapters include attitudinal paths for the link between childhood trauma and adult HIV risk and the link between child sexual abuse and risky sexual behavior. One chapter discusses the role of dissociative tendencies, a controversial area in the field of sexual trauma and memory recovery. The important issue appears to be the link between victims of child sexual abuse who later become revictimized as adults.

The final section discusses interventions to promote healthier sexual outcomes among the survivors of child sexual abuse. The hopeful notion of the book is that it does not have to be inevitable that people who were sexually abused as children will be victimized again as adults. The chapters in this section discuss interventions to prevent further abuse, risk-reduction approaches, group therapy for victims of child sexual abuse, and effective risk-reduction programs.

Most of the authors of the chapters are psychologists and researchers. David Spiegel is the only M.D., and his work with hypnosis and memory retrieval is well-known. The book is well written, well edited, and well referenced. For the re-