

Case Report

Serotonin Syndrome Developing Immediately after the Initiation of Low-Dose Methadone Therapy: A Case Report

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Keywords

Serotonin syndrome · Methadone · Oxycodone

Abstract

We present a case in which serotonin syndrome developed immediately after the initiation of low-dose methadone following an increase in oxycodone dose and the initiation of duloxetine. The symptoms of serotonin syndrome were alleviated and later disappeared upon cessation of methadone alone. The case was a 47-year-old woman with a desmoid tumor. The administration of duloxetine (20 mg/day) was initiated while the patient took oxycodone sustained-release tablets (40 mg/day). The following day, excessive perspiration, chills, and tremors appeared after the initiation of 15 mg/day methadone. Discontinuation of methadone led to an alleviation of the symptoms which completely disappeared 3 days later. The results suggest that low-dose methadone can trigger serotonin syndrome as early as after the first dose. Thus, it is important to be aware of the risks and to immediately take action if symptoms appear.

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Introduction

Serotonin syndrome (SS) is an adverse event triggered by the use of molecules such as selective serotonin reuptake inhibitors and serotonin-norepinephrine reuptake inhibitors and causes some symptoms such as excessive perspiration, clonus, and tremors due to

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Serotonin Syndrome Case Report

Kerry Bone, Simon Mills



Serotonin Syndrome Case Report:

Case reports in psychopharmacology Patricia Di Ciano, Matej Stuhec, 2024-02-06 **Clinical Handbook of Psychotropic Drugs** Ric M. Procyshyn, Katelyn Halpape, David D. Kim, 2025-05-12

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This information is used to improve the use of drugs as well as to design better and safer drugs for the future and is relevant to personalized medicine in trying to match the right drugs to the patients Drug induced Neurological Disorders offers a unique approach to this important topic by integrating clinical neurology with pharmacology with a focus on effects of drugs on the nervous system including those used for the treatment of neurological disorders as well systemic diseases Many adverse effects involve multiple systems of the body and the syndromes with predominant effect on the nervous system are included in this book *Clinical Handbook of Psychotropic Drugs for Children and Adolescents* Dean Elbe,Tyler R. Black,Ian R. McGrane,Sabina Choi,2023-04-24 Quick and comprehensive information on psychotropic drugs for children and adolescents Accurate and up to date Specific to children and adolescents Charts and tables help decision making Icons and full color More about this book The Clinical Handbook of Psychotropic Drugs for Children and Adolescents is a unique resource to help you make the right choices about psychotropic medications for younger patients The fifth edition of this widely acclaimed reference has been fully updated and expanded Updated information on psychiatric disorders in children and adolescents Unique comparison charts dosages side effects pharmacokinetics interactions that allow you to see at a glance which medication is the most suitable for each patient Instantly recognizable icons in full color throughout allowing you to quickly find all the information you seek General information on medications availability and indications Drug action dosing pharmacokinetics and related areas Warnings and precautions Patient related information such as lab monitoring recommendations nursing implications and patient advice Clearly written patient and caregiver information sheets as printable pdf files This book is a must for all mental health professionals working with children and adolescents who need an up to date easy to use comprehensive summary of all the most relevant information about psychotropic drugs New in this edition New chapters on Prescribing Safely and Ethically to Children and Adolescents Pharmacogenetic Information for Common Psychotropic Drugs and Aggression Management in Children and Adolescents Neuroscience based nomenclature added to Product Availability tables Antipsychotic Induced Extrapyrimal Side Effect EPSE chapter completely revised plus new section on monitoring scales for EPSE Anxiolytics section on buspirone and benzodiazepine comparison table revised

Psychopharmacology Bulletin ,1998 *Cumulated Index Medicus* ,1997 Movement Disorder Emergencies Steven J. Frucht,2021-10-02 This book logically and systematically reviews the major movement disorder emergencies It instructs the reader on how to recognize and manage these problems This updated new edition of Movement Disorder Emergencies consists of five comprehensive sections It begins with chapters that relay the various practical approaches one can administer when treating a patient with a movement disorder emergency Section two then delves into specific hyperacute movement disorder emergencies such as acute parkinsonism serotonin syndrome and malignant catatonia Following this section three examines various acute movement disorder emergencies including tic emergencies and Sydenham s chorea Sections four and five explore issues that can occur during treatment such as pitfalls in diagnosis and risks in the clinic

Written by prominent neurologists from around the world *Movement Disorder Emergencies* 3rd edition is a practical reference that achieves excellence in diagnosis and management of movement disorder emergencies *Side Effects of Drugs Annual* Sidhartha D. Ray, 2021-11-04 *Side Effects of Drugs Annual* A Worldwide Yearly Survey of New Data in Adverse Drug Reactions Volume 43 first published in 1977 and continually published as a yearly update to the voluminous encyclopedia Meyler's *Side Effects of Drugs* presents clinicians and medical investigators with a critical survey of new data and trends in adverse drug reactions and interactions Topics covered in this new release include Central Nervous System Stimulants and Drugs that Suppress Appetite Antidepressants Lithium Drugs of Abuse Hypnotics and Sedatives Antipsychotic Drugs Antiepileptics Opioid Analgesics and Narcotic Antagonists Anti Inflammatory and Antipyretic Analgesics and Drugs Used in Gout and much more Provides a critical yearly survey of the new data and trends regarding the side effects of drugs Authored and reviewed by worldwide pioneers in the clinical and practice sciences Presents an essential clinical guide on the side effects of drugs for practitioners and healthcare professionals alike *Panic Disorder* Antonio Egidio Nardi, Rafael Christophe R. Freire, 2016-05-25 The book focuses on the neurobiological and treatment aspects of panic disorder It describes the most recent research data and pharmacological therapeutic aspects of panic disorder The biochemical respiratory imaging and translational aspects will be together with diagnostic and pharmacological discussion We have the collaboration of important and recognized researchers from various countries Brazil USA Italy Spain United Kingdom and Switzerland all of them with a continuous and relevant work on anxiety disorders *Panic Disorder Neurobiological and Treatment Aspects* is intended to be a reference book for those who research or treat panic disorder and anxiety disorder patients *Side Effects of Drugs Annual*, 2024-11-20 *Side Effects of Drugs Annual* A Worldwide Yearly Survey of New Data in Adverse Drug Reactions Volume 46 first published in 1977 presents clinicians and medical investigators with a critical survey of new data and trends in adverse drug reactions and interactions Topics covered include ADRs ADEs and SEDs A Bird's Eye View Lithium Drugs of abuse Side effects of drugs used in the treatment of Alzheimer's disease Sedatives and hypnotics Antipsychotic agents Anti epileptic Medications Side effects of opioid analgesics and narcotic antagonists Anti inflammatory and antipyretic analgesics and drugs used in gout Side effects of local anesthetics and therapeutic gases and more Other sections covered include Antihistamines H1 receptor antagonists Drugs that act on the respiratory tract Positive inotropic drugs and drugs used in dysrhythmias Beta adrenergic antagonists and antianginal drugs Drugs acting on the cerebral and peripheral circulations Antihypertensive drugs and much much more Provides a critical yearly survey of the new data and trends regarding the side effects of drugs Authored and reviewed by worldwide pioneers in the clinical and practice sciences Presents an essential clinical guide on the side effects of drugs for practitioners and healthcare professionals alike

Applied Clinical Pharmacokinetics and Pharmacodynamics of Psychopharmacological Agents Michael W. Jann, Scott R. Penzak, Lawrence J. Cohen, 2016-03-02 This book is a comprehensive resource on psychotropic medications

detailing the latest methods for defining their characteristics their use in different patient populations and drug drug interactions an important collection of information for clinicians students researchers and members of the pharmaceutical industry alike The first section provides the foundational principles of these drugs Mathematical modeling of parameters that affect their entry to and exit from the central nervous system CNS compartment are presented on an individual basis and then applied to target populations with specific disease states Methods and characteristics that inform the transfer of these drugs from the laboratory bench to use in patient care are discussed including imaging techniques genetics and physiological barriers such as the blood brain barrier The second section describes the characteristics of specific agents nominally arranged into different therapeutic categories and with reference crossover use in different disease states The pharmacologic characteristics of different drug formulations are explored in the context of their ability to improve patient adherence The third section focuses on drug drug interactions Psychotropic medications from different categories are frequently prescribed together or alongside medications used to treat comorbid conditions and the information provided is directly relevant to the clinic as a result The clinical application of pharmacokinetics and pharmacodynamics of CNS agents has made significant progress over the past 50 years and new information is reported by numerous publications in psychiatry neurology and pharmacology Our understanding of the interrelationship between these medications receptors drug transporters as well as techniques for measurement and monitoring their interactions is frequently updated However with information presented on a host of different platforms and in different formats obtaining the full picture can be difficult This title aims to collate this information into a single source that can be easily interpreted and applied towards patient care by the clinical practitioner and act as a reference for all others who have an interest in psychopharmacological agents

Adolescent Psychiatry

Leo Sher, Joav Merrick, 2013-10-14 Psychiatric disorders in adolescents are an important social problem which is relevant to almost all healthcare professionals According to the results of The National Comorbidity Survey Adolescent Supplement NCS A the lifetime prevalence of anxiety behavior mood and substance use disorders among adolescents was 31.9% 19.1% 14.3% and 11.4% respectively Approximately 40% of participants in this survey with one class of disorder also met criteria for another class of lifetime disorder Comorbidity is increasingly recognized as a key feature of mental disorders among adolescents Female adolescents are more likely than males to have mood and anxiety disorders but less likely to have behavioral and substance use disorders Regrettably medical professionals are not sufficiently trained about adolescent psychiatric disorders For example primary care providers correctly identify less than a fourth of youth with a depressive or anxiety disorder Also many clinicians underestimate the importance of the problem of adolescent psychiatric illnesses and suicidal behavior Lack of skilled medical providers impedes the delivery of needed services to adolescents with mental health issues This coupled with a lag in the ability of primary health care services to incorporate psychiatric interventions and a failure of public health initiatives to pay attention to adolescent mental health problems has led to continuing gaps in care

over decades despite the public pronouncements of needs In this book you will find relevant information for health professionals since we believe that the mental health of adolescents is essential for sustaining healthy and productive societies *The Maudsley Prescribing Guidelines in Psychiatry* David M. Taylor, Thomas R. E. Barnes, Allan H. Young, 2025-03-20 The most up to date edition of the gold standard handbook on the safe and effective prescribing of psychotropic agents Prescribing medications that treat mental illness is a challenging but essential component of clinical practice Successful treatment outcomes require careful drug choice and dosage and other considerations can also have an important impact on patient experiences and long term care In the newly revised fifteenth edition of *The Maudsley Prescribing Guidelines in Psychiatry* you will find up to date and authoritative guidance on prescribing psychotropic medications to patients It is an indispensable evidence based handbook that will continue to serve a new generation of clinicians and trainees The book includes analyses of all psychotropic drugs currently used in the United States the United Kingdom Canada Australia New Zealand and Japan It also contains detailed discussions of common and uncommon adverse effects the ramifications of switching medications special patient groups and other clinically relevant subjects A fully updated reference list closes out each section as well *The Maudsley Prescribing Guidelines in Psychiatry* is perfect for trainees seeking essential and accurate information on the rational safe and effective use of medications for patients with mental illness Practising clinicians will also benefit from the included guidance on complex issues that might arise less frequently

Drug-induced Diseases James E. Tisdale, Douglas A. Miller, 2010 Since the first edition of this book was published in 2005 drug therapy has seen both breakthrough advances and sobering setbacks The changes will continue That's why every health care professional hospital and health system pharmacy and medical school needs this invaluable reference It will help you detect prevent and manage drug related diseases And also remind you to always ask yourself the increasingly critical question Could this disease be drug related **Case Reports in Movement Disorders - volume III - 2023** Alberto Albanese, 2024-04-08 This Research Topic aims to collect all the Case Reports submitted to the Movement Disorders section All the Case Reports submitted to this collection will be personally assessed by a senior Associate Editor before the beginning of the peer review process Please make sure your article adheres to the following guidelines before submitting it Case Reports highlight unique cases of patients that present with an unexpected diagnosis treatment outcome or clinical course

Practical Psychopharmacology Joseph F. Goldberg, Stephen M. Stahl, 2021-04-29 A practical guide translating clinical trials findings across major psychiatric disorders to devise tailored evidence based treatments *Issues in Critical and Emergency Medicine: 2013 Edition*, 2013-05-01 *Issues in Critical and Emergency Medicine 2013 Edition* is a ScholarlyEditions book that delivers timely authoritative and comprehensive information about Injury Research The editors have built *Issues in Critical and Emergency Medicine 2013 Edition* on the vast information databases of ScholarlyNews You can expect the information about Injury Research in this book to be deeper than what you can access anywhere else as well

as consistently reliable authoritative informed and relevant The content of Issues in Critical and Emergency Medicine 2013 Edition has been produced by the world s leading scientists engineers analysts research institutions and companies All of the content is from peer reviewed sources and all of it is written assembled and edited by the editors at ScholarlyEditions and available exclusively from us You now have a source you can cite with authority confidence and credibility More information is available at <http://www.ScholarlyEditions.com> Treatment of Depression - Newer Pharmacotherapies Cynthia D.

Mulrow,2000-02 Major depressive disorders are persistent recurring illnesses that are the 4th most important cause of worldwide loss in disability adjusted life years and is likely to become the 2nd most important within 20 years A continued quest for more effective treatments has spawned newer antidepressants and herbal treatments which have contributed to explosive growth in the prescribing of antidepressants increasing pharmacy costs and wider but sometimes confusing choices for clinicians and patients This report provides a comprehensive evaluation of the benefit and adverse effects of newer pharmacotherapies and herbal treatments **Principles and Practice of Phytotherapy** Kerry Bone,Simon

Mills,2012-12-31 The authoritative and comprehensive modern textbook on western herbal medicine now in its second edition This long awaited second edition of Principles and Practice of Phytotherapy covers all major aspects of herbal medicine from fundamental concepts traditional use and scientific research through to safety effective dosage and clinical applications Written by herbal practitioners with active experience in clinical practice education manufacturing and research the textbook is both practical and evidence based The focus always is on the importance of tailoring the treatment to the individual case New insights are given into the herbal management of approximately 100 modern ailments including some of the most challenging medical conditions such as asthma inflammatory bowel disease and other complex autoimmune and inflammatory conditions and there is vibrant discussion around the contribution of phytotherapy in general to modern health issues including health ageing Fully referenced throughout with more than 10 000 citations the book is a core resource for students and practitioners of phytotherapy and naturopathy and will be of value to all healthcare professionals pharmacists doctors nurses with an interest in herbal therapeutics 50 evidence based monographs including 7 new herbs Rational guidance to phytotherapeutic strategies in the consulting room New appendices provide useful information on topics such as herbal actions dosage in children and reading and interpreting herbal clinical trials Comprehensive revision of vital safety data including an extensive herb drug interaction chart 50 evidence based monographs including 7 new herbs Rational guidance to phytotherapeutic strategies in the consulting room New appendices provide useful information on topics such as herbal actions dosage in children and reading and interpreting herbal clinical trials Comprehensive revision of vital safety data including an extensive herb drug interaction chart *Textbook of Clinical Management of Club Drugs and Novel*

Psychoactive Substances Dima Abdulrahim,Owen Bowden-Jones,2022-10-13 There are global concerns about the proliferation and misuse of club drugs and novel psychoactive substances yet we know little about their harms and research

on clinical management and treatment remains limited This book fills the knowledge gap by providing a detailed overview of the research evidence available to date The book provides a framework that allows readers to understand this large number of new drugs using classifications based on primary psychoactive effect Within this framework the book provides detailed reviews of the more commonly used drugs Each chapter explores pharmacology patterns and mode of use acute and chronic harms and clinical interventions supported by research evidence An invaluable resource for clinical staff this book will support clinicians working in the emergency department substance misuse and addiction services mental health services primary care sexual health services and more It will also be of interest to academics and those developing drug policy

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