What can we offer our patients suffering from neuropathic pain?

SOMATOSENSORY REHABILITATION OF PAIN
LEVEL 1

Instructor: Eva Létourneau BSc OT, M. Read., Certified Somatosensory Therapist of Pain CSTP®
16 and 17 April 2015 / Price CAD Dollars 700

The somatosensory rehabilitation of pain method offers an alternative to treat neuropathic pain (ex. neuralgia i.e. post carpal tunnel syndrome release, CRPS, etc.).

Originally created for hand therapy, this method is about treating the area of altered skin sensation in relation with a specific nerve. It concerns the whole body and its 240 cutaneous branches.

Normalisation of cutaneous sensory abnormality has a positive impact on neuropathic pain: improving function, improving patient’s quality of life and even its working capacity.

The content of level 1 in somatosensory rehabilitation of pain includes:
- Evaluation of axonal lesions: mapping the hypoaesthetic territory, static 2-point discrimination test, tingling signs (Tinel etc.) and somatosensory qualifiers.
- Somatosensory rehabilitation of pain paradigm, based on neuroplasticity mechanisms.
- Static mechanical alldynia: clinical sign and treatment with distant counter-stimulation.
- Workshop on somatosensory testing.
Please note that the following books are provided to support this training:


- Each student will receive a personal handout that includes every updating between the 1st edition in English and the 3rd edition (January 2015) published in French.

**Learning aims:**

- Evaluate disorders of cutaneous sense and neuropathic pain associated.
- Define therapeutics strategies and treat cutaneous sense disorders to lower neuropathic pain.
- Prevent neuropathic pain complications with somatosensory rehabilitation of pain method.

**Subscription:**

[https://ecommerce.dexero.com/shopping/readap/readap2/event/fc_ergo_cliniciens/Detail.view](https://ecommerce.dexero.com/shopping/readap/readap2/event/fc_ergo_cliniciens/Detail.view)
Handbook for Somatosensory Rehabilitation

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The lives of Claude Spicher and me have become interwoven. And yet we have never met. Ideas and research are the material of which the fabric is woven, and the process of weaving is the process of writing. The finished product for me was my first book, Evaluation of Sensibility in the Hand and Re-Education of Sensation, published in 1981, and my last book, Somatosensory Testing and Rehabilitation, published in 1997. The finished product for Claude Spicher is what you now hold in your hands, the Handbook for Somatosensory Rehabilitation. It is as if our writings were a word puzzle in which the individual words have been shifted to create something similar yet different.

Claude Spicher has written a scholarly, enlightening book that is visually fun to read, and yet a challenge to the intellect. This handbook was carefully written with love, as it represents the culmination of more than two decades of his clinical work. His handbook is full of practical techniques to help patients with peripheral nerve problems using classic approaches and his own synthesis of these to create novel approaches as well. Therapists in all disciplines will learn from studying this material. One day it will be my honor to meet him in person, and have our actual lives, instead of our virtual lives, intertwined.

A Lee Dellon, MD

Professor of Plastic Surgery and Neurosurgery at Johns Hopkins University School of Medicine & University of Maryland, Baltimore University of Arizona, Tucson

The Handbook for Somatosensory Rehabilitation provides a practical primer for individuals interested in the rehabilitation of patients following peripheral nerve lesions and particularly painful nerve lesions. This book will be useful primarily to rehabilitation specialists interested in sensory recovery and rehabilitation following nerve injury.

This book is authored by Claude Spicher, an occupational therapist who has devoted his career to the treatment and study of patients with peripheral nerve injuries. Spicher is a certified hand therapist of the Swiss Society for Hand Therapy and in 2004 founded the Somatosensory Rehabilitation Center in Switzerland. This book is easy to read and understand; it is obviously written with passion by an individual dedicated to this specialty.

Part One of this book outlines the basic definitions, testing, and rehabilitation principles for patients following neurological lesions. Spicher provides the reader with an excellent summary of the critical aspects that pertain to the evaluation of patients with sensory nerve injuries. He provides an excellent compilation of definitions, terms, and syndromes that are commonly seen in this patient population. With a sufficient bibliography, the reader is quickly directed to other, more detailed monographs and references. This book is not meant to provide a definitive literature review, but the comprehensive bibliography provides the reader with the capability to pursue other sources of specific interest.

Part Two addresses primarily the evaluation and treatment of patients with neuropathic pain and includes some specific treatment strategies that have worked in the author’s personal experience. This book also discusses and recommends the McGill Pain Questionnaire, which is just one of many questionnaires that are available to assess pain. Spicher should be commended for recommending the use of a valid and reliable measure for pain. Pain, however, is a complex phenomenon with psychosocial issues, such as anxiety, depression, and catastrophic pain, that can also impact these patients and should be considered in management but are beyond evaluation with the McGill Pain Questionnaire. In other sections, such as CRPS, the reader is provided with a brief overview of the topic, and the interested reader should research other sources for more comprehensive reviews.

This book provides the reader with an overview of a very complicated problem. It is good “starter” material for individuals interested in this patient population. It is filled with detailed personal reflection. As such, Spicher clearly states that he is not intending this book to be anything more than his interpretation over his very long career in managing these patients. Perhaps the most useful part of this book is the bibliography, which will direct the reader to manuscripts that may be obscure but also relevant. The book achieves its intent as Spicher states: A “handbook based on practice with its originality in the attempt to synthesize numerous publications and in the introduction of a few personal touches.” It is, in fact, Spicher’s personal touches, anecdotes, and musings that readers will find enjoyable and perhaps stimulating and beneficial to the evaluation and management of their own patients.

Susan E. Mackinnon, MD
St. Louis, MO

Christine B. Novak, MS
Toronto, Ontario, Canada
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“This handbook for somatosensory rehabilitation deals with the definitions, testing, rehabilitation and prevention of disorders of the cutaneous sense.” Claude Spicher.

Mr. Spicher, an occupational therapist, begins by reviewing cutaneous sense and the cells responsible. He provides background information reviewing research performed previously; initial identifications and classifications. The rationale for which test to use and arguments for systematic testing are presented. Sensibility testing is described in great detail. The objective of the test, the materials to use, positioning and administration, explanation to the patient, results, and interpretation are all explained to the reader.

“Rehabilitation of hyposensitivity” is the author’s term, rather than the more typical somatosensory rehabilitation. Five steps of rehabilitation are described. The program is detailed and progression to the next step is allowed, once certain criteria are met. The last step consists of permanent assessment with exacting descriptions of test administration for axonal lesion. Mr. Spicher provides illustrations of the nerve lesion, the stages of regeneration, and the rehabilitation phase to be used at that time and location.

Part 2 of this text addresses painful complications. First, reviewing the use of analgesics is offered. Subsequently, the author reviews the use and administration of the McGill Pain Questionnaire. Careful assessment of allodynia is addressed.

Rehabilitation is through mechanical vibration working from a less painful region to desensitization of the site of the axonal lesion. A case review of a patient with a Morton’s neuroma outlines four stages of neuralgia: hypoesthesia, mechanical alldynia, neuralgic prodrome, and neuralgia. Complex regional pain syndrome type II is treated in much the same way with careful diagnostic testing to identify the axonal lesion through aesthesiography, static two-point discrimination, mapping of Tinel’s signs, and somatosensory qualifiers. The author explains that the presence of hypoesthesia as the time for rehabilitation to begin. A multidisciplinary approach is recommended to include pharmacological agents, modalities, and manual techniques all performed below the pain threshold.

The final chapter addresses prevention through careful screening and early identification and reducing the prevalence of chronic disorders and their recurrence.

Many tables and forms are provided at the back of the book to assist the therapist with identifying, mapping, and treatment of axonal lesions.

There is no question that this text is extremely well outlined in its presentation. The tables are clear and important information is outlined in bullet list form or in bold type. I appreciate this approach since my days, probably much like yours, are very busy and time for reading a new text must be efficient.

This text represents a very detailed discussion of somatosensory rehabilitation and a good resource for those therapists who work with these patients. However, locating this book may be a challenge as it is published in Paris, France. It is not offered through Barnes and Noble or Amazon.com. A Google search directed me to the publisher’s website, which is partially presented in French.—Nancy Beaman, OTR/L, CHT
Book review
Catherine E. Lang *
* Program in Physical Therapy, Program in Occupational Therapy, Department of Neurology, Washington University, St Louis, MO 63108-2212, USA

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Book review


This book is a useful compilation of evidence and ideas regarding somatosensory rehabilitation. Much of the material was developed by the author, Dr Spicher, from his somatosensory rehabilitation clinic. The text is generally well written and easy to read, despite occasional awkward English sentences. A thoughtful Foreword by Dr Dellon helps to orient the reader to where this book fits into the history and current practice of somatosensory rehabilitation.

The Introduction by Dr Spicher explains how the aim of the book is to bring together information from the disciplines of rehabilitation, neuroscience, rheumatology, and surgery into a single volume for clinicians attempting to rehabilitate somatosensation.

As the title suggests, the volume is intended as a handbook and not as a complete, academic textbook on the topic. The main portion of the book is divided into two sections: a section focusing on evaluation and rehabilitation of basic somatosensory disorders and a section focusing on the prevention, evaluation, and rehabilitation of more complex somatosensory disorders.

The first section is titled “Definitions, Testing, and Rehabilitation of Basic Cutaneous Sense Disorders in Case of Neurological Lesions”. Chapter 1 starts by making several useful categorizations about somatosensation. The utility of these categorizations is not at the basic science level, but as a framework for clinicians to think about somatosensory modalities in their practice. The second chapter provides specific information about how to test cutaneous senses. As written, the evaluation could easily be followed by novice clinicians with little experience of somatosensory rehabilitation. A logical argument is given for the importance of doing specific tests, the importance of performing each test in a systematic way, and the importance of performing the set of tests in a specific order. Like many specialty areas of rehabilitation, somatosensory rehabilitation would greatly benefit from a standardized, systematic, and thorough examination. This book proposes a reasonable one that could be readily used by most clinicians. The third chapter provides exact instructions on how to perform pressure perception threshold testing. Since this type of testing can be subject to errors if not done in a standardized manner, this chapter is valuable, even for those clinicians who’s primary focus is not somatosensory rehabilitation. The fourth and last chapter in this section covers rehabilitation of hyposensitivity. A number of specific techniques are suggested with detailed methodology as to how to apply them. Some of the techniques are to be done during therapy sessions and others are suggested as part of a home program. The techniques and their utility are largely derived from the author’s clinical experience vs. from extensive testing in rigorous randomized, controlled trials. The arguments for their value are logical, but the reader should recognize that much work is needed before we can begin to judge their efficacy. This chapter ends with three patient case examples that allow the reader to see how an overall program of somatosensory rehabilitation could be structured for specific individuals.

The second section is titled “Definitions, Testing, Rehabilitation, and Prevention of Painful Complications of Cutaneous Sense Disorders in Case of Peripheral Neurological Lesions”. The first chapter in this section provides an interesting argument and discussion of how basic somatosensory disorders can develop into painful and disabling conditions. The second chapter provides a history and description of the McGill Pain Questionnaire. The author appropriately promotes this questionnaire as a critical tool for evaluating and measuring these complex somatosensory disorders. The third chapter defines Mechanical Allodynia and provides detailed information on how to assess and treat this complicated problem. As with rehabilitation of the basic somatosensory disorders in Section 1, much of the evidence for these treatments is derived from the author’s extensive clinical experience. The fourth
chapter in Section 2 discusses how to desensitize the site of axonal lesions. Contained within this chapter is a step-by-step account of how to use pain scales.

This explicit description is valuable for the broader world of clinicians, most of whom use pain scales on a daily basis but without the rigorous (but not time consuming) application described here. The fifth chapter provides definitions, and suggestions for evaluation and treatment of neuralgias or neuropathic pains. The sixth chapter provides similar information for Complex Regional Pain Syndromes. The final chapter of Section 2 discusses prevention of these complex disorders and how to discuss this with individual patients who might be at risk. The premise that underlies this last chapter and much of Section 2 is that basic disorders will evolve into complex and disabling disorders if left untreated or if poorly treated. This premise is derived from impressive clinical evidence from the author’s experience but has not been tested in larger, epidemiological studies.

Other attractive features of this book include the appendices and the historical information nested in each chapter. An extensive set of appendices are provided so that readers have the necessary materials to implement the ideas and treatments described in the book. A highly enjoyable aspect of this book was the fact that historical tidbits were woven into each topic addressed. The author should be commended for his extensive knowledge of this history and for sharing it with others. It was interesting to learn the historical context from which today’s definitions, evaluations, and treatments have emerged.

The tables and figures used throughout generally complement the text and make material quickly accessible. One problem with several figures is that they are described in the text and legend as having color, but are printed in black and white. This publication error means that the reader has to work a little harder to decipher what is illustrated in several figures.

In summary, this book attains its stated purpose of being a handbook for somatosensory rehabilitation. The step-by-step instructions can be readily followed by readers. It is clear in the Conclusion that the field of somatosensory rehabilitation has no room for impatient and imprecise clinicians. The material set forth in this book can now serve as a basis for systematic investigation of the evaluation and treatment of somatosensory rehabilitation.

Catherine E. Lang
Assistant Professor
Program in Physical Therapy
Program in Occupational Therapy
Department of Neurology
Washington University
Campus Box 8502
4444 Forest Park Blvd.
St Louis, MO 63108-2212, USA
Tel: +1-314-286-1945.
E-mail: langc@wustl.edu
La méthode de rééducation sensitive de la douleur
by Claude Spicher & Isabelle Quintal

Foreword

This new edition of Claude Spicher’s excellent “Handbook for Somatosensory Rehabilitation” covers every important aspect of the field. It describes recent advances in diagnosing the various clinical states and the procedures to combat them. It will stimulate all health professionals who are dedicated to the management of pain and associated problems.

The field of pain has recently undergone a major revolution. Historically, pain has been understood as an unidimensional sensation produced by injury or disease. We now possess a much broader concept that comprises the emotional, cognitive and somatosensory dimensions of pain experience, as well as an impressive array of new approaches to pain management. Chronic pain especially, is now a major challenge to all health sciences and professions.

An important component of the gate control theory which I proposed with Patrick Wall is that somatosensory stimuli of various kinds—electrical pulses, massage, vibration, cold, heat—can “close the gate” to those nerve impulse patterns that generate pain. The theory also recognizes that pain is a multidimensional experience determined by psychological as well as physical factors, which broadens the scope of pain therapies. Patients with chronic pain need every bit of the armamentarium to battle the pain. John Bonica, a brilliant anaesthesiologist, played a huge role in these developments. He contended that chronic pain is not a “symptom” but a syndrome in its own right, and requires therapists from a wide range of disciplines.
The recognition that pain is the result of multiple determinants gave rise to a variety of psychological approaches such as relaxation and cognitive therapies and also provided an explanation for the effectiveness of transcutaneous electrical nerve stimulation (TENS) and physical therapy procedures that bring substantial pain relief to large numbers of people.

The pain revolution has taken us from a direct-line pain pathway to an open biological system that comprises multiple sensory inputs, memories of past experiences, personal and social expectations, genetic contributions, gender, aging, and stress patterns involving the endocrine, autonomic and immune systems. Pain is now universally recognized as a major challenge for all health sciences and professions. Every aspect of life, from birth to dying, has characteristic pain problems. Genetics, until recently, was rarely considered relevant to the understanding of pain, but sophisticated epidemiological and laboratory studies have established genetic predispositions related to pain as an essential component of the field. The study of pain, therefore, has broadened and now incorporates research in epidemiology and medical genetics as well as sociological and cultural studies.

This “Handbook for Somatosensory Rehabilitation” encompasses chronic as well as acute forms of pain. It highlights a mission for all of us: to provide relief from all forms of chronic pain. We must also encourage patients to communicate about their pain, which stimulated me to develop the McGill Pain Questionnaire. If we pursue these goals together, as members of the full range of health professions, we can hope to meet the goal we all strive for: to help our fellow human beings who suffer pain.

Ronald Melzack
McGill University
Montreal, Quebec, Canada
FOREWORD

Although anatomists have, for a long time, instructed both students and clinical colleagues about the importance of human skin (often describing the skin as “the largest organ in the human body”), it remains that the skin has received far too little attention. This is unwarranted, both biologically and clinically. It clearly does not require great imagination to appreciate the skin’s importance as a protective barrier, or indeed to realise how it binds, and configures, underlying structures. Furthermore, we are sufficiently advanced scientifically to understand well how skin is involved with temperature regulation.

When assessing the skin’s clinical importance, most times mention is made of Langer lines and also the application of knowledge relating to the skin’s innervation and sensory perception. Unfortunately and all too frequently, knowledge and understanding of the cutaneous innervation is rather vague (as displayed in any of the classical anatomy textbooks) and is often based on historical perspectives and not clinical examples.

It is with great pleasure, therefore, that I have the privilege of providing a foreword to this book by Claude Spicher, Nadège Desfoux and Pierre Sprumont, who are themselves distinguished therapists and anatomists. This book is based on outstanding research and, in consequence, it maps out the cutaneous peripheral nerve fields by specific reference to clinical cases. To use a “buzz word” that is nowadays commonly employed in medical disciplines: it is evidence-based. The understanding of the territories delineating the cutaneous distribution of the nerves is of obvious clinical importance and is treated here through a unique atlas format that will be immensely useful to clinicians assessing patients with neurological disorders. Indeed, even those whose prime clinical interests do not directly accord with cutaneous innervations should, nonetheless, appreciate the approaches adopted to analyse, and record, nerve topography. I fully anticipate that the authors’ approaches will generate praise, the book being exemplary in showing how anatomical information can be organised for best clinical utilisation. The authors are, therefore, to be congratulated on completing such a fine enterprise.

Bernard Moxham

Professor of Anatomy, Cardiff University,
President of the International Federation of Associations of Anatomists (IFAA)