The incidence of whiplash injuries has been estimated to be 1/1,000 people per year in the Western world. Chronic spine pain and associated symptoms following whiplash injury cause severe individual burdens of disease and high costs of healthcare systems at least in the Western countries (with the exception of Lithuania and Greece due to specific approach of health system and insurance companies to whiplash associated disorders in these countries).

The first edition of this book was prepared one year before that the Quebec Task Force (QTF) presented the first classification of whiplash associated disorders (WADs). QTF guidelines are still widely accepted both for diagnosis and treatment.

Furthermore, evidence based medicine (EBM) became more and more important in these last 10 years in leading clinicians toward the most effective approach to diseases and disorders, including WADs. However, whiplash mechanism is so complicated to lead to complex disturbances that very frequently they are very difficult to simplify into EBM tracks.

The term “whiplash” dates back to 1928, when the American physician H.E. Crowe used it in a symposium of traffic accidents held in San Francisco. Crowe did not refer to the injury as such, but as the motion of the head and neck that underwent in conjunction with a collision.

The interaction between the accident and the human body is not simply a mechanic interaction. In contrast to mechanical systems in which component parts interact linearly to produce a predictable output, the components of complex systems interact nonlinearly over multiple scales and produce unexpected results. The output of mechanical systems can be controlled by manipulating each one of its parts, while the output of complex systems is dynamic, behaving differently according to initial conditions and feedback. This is the case of whiplash and WADs.

In order to minimize the risk of long-term problems among people with acute whiplash injury, concurrently acute stress disorder (ASD) and/or posttraumatic stress disorder (PTSD) should be diagnosed and adequately treated.

For the above complex reasons, we thought to be necessary an updating of the first edition that takes into account the different challenges to whiplash, the most updated EBM diagnostic and therapeutic indications, and the evolution of QTF guidelines.
More specifically, in this edition, the Editors tried to include all the pathological effects of whiplash and not just the traditional neck and spine effects. The leading idea of this book is the conception of whiplash as a trauma of the body as a whole, obviously with different impact on the different parts of the body. The second leading idea is that the effects of whiplash are substantially unpredictable per se and thus a brain damage has to be expected just like a temporo-mandibular joint disorder or low back pain.

Some problems have been encountered in updating the chapter dedicated to medico-legal aspects. Various studies on how possible insurance compensation may influence the course of whiplash injuries have produced diverging results. Generally, however, there is no evidence indicating any significant difference in the results between those who have applied for such compensation and those who have not.

Furthermore, a common legal procedure about compensation of whiplash injuries in the different countries of the Western world is lacking. For these reasons we focused on management and treatment of patients disorders, but we avoided to include a chapter about medico-legal aspects of WADs.

Finally, we can state that the spirit of this second edition is paying our attention to collect in this book *What’s new – What else besides pain – What to do* for patients affected with WADs.

Dario C. Alpini
Guido Brugnoni
Antonio Cesarani

Milan, Italy
November 2013
This book is based on the proceedings and discussions of a closed workshop held in Santa Margherita Ligure in January 1995.

It was an original scientific experience: no public was admitted. For 3 days the main contributors of this book remained closed in a wonderful hotel.

At the same hotel in the 1930s, Guglielmo Marconi performed his first experiments with radio waves. The hotel was therefore an ideal place, although the problems we discussed were not so “revolutionary” like Marconi’s experiments.

On these days round tables, we performed highly restricted meetings on specific topics and presentation of selected papers, only for very few persons, were performed.

Discussions were on definition, ethiopathogenesis, physiopathology, clinical and instrumental evaluations, and medicolegal and therapeutic aspects of whiplash injuries.

All the attendants tried to report and discuss personal experiences and ideas in order to compare them.

All the discussions were especially aimed to prepare the chapters you will read in this book.

We returned to our homes very tired, but very rich in our minds. We really hope that after reading this book you will be as tired as rich.

We are very grateful to Pharmacia, who supported the closed workshop and the preparation of this publication.

Antonio Cesarani

Milan, Italy

Dario C. Alpini
Whiplash Injuries
Diagnosis and Treatment
Alpini, D.C.; Brugnoni, G.; Cesarani, A. (Eds.)
2014, XIV, 404 p. 114 illus., 26 illus. in color., Hardcover
ISBN: 978-88-470-5485-1