

## **BOOK REVIEW**

### **Ventilator Induced Lung Injury in Non-Invasive Ventilatory Support: Pathophysiology, Treatment and Prevention**

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The use of non-invasive mechanical ventilation has exploded over the last few decades as a therapy used in a diverse group of diseases encompassing patients at home to the most critically ill ICU patient. No other therapy serves so many conditions and patients in such different environments. And like all medical support therapies it may take several years to discover that it may have some negative effects when used in certain patients and may not be ideal when used without a proper understanding of pathophysiology. Dr. Esquinas, an internationally known expert in the field, has put together an outstanding group of experts from around the globe to address the physiologic effects of non-invasive ventilation. This well-organized book truly covers the material in well written easy to understand manner.

It is key for the practitioner to understand the pathophysiology of this mode of support in specific patient scenarios. This text exceptionally covers the concepts of biotrauma, lung mechanics, inflammatory cascades, barotrauma and the effects of atelectasis giving the reader a better understanding of adverse effects on the clinical and cellular level. It also addresses the aspects of the time course of use and how it will impact patients. The authors genuinely address these topics and through excellent editing material is reinforced throughout the book in a very clear manner. Pressure volume loops and waveform monitoring are also covered and point out how key close monitoring of the physiologic response can be used to titrate this therapy to benefit our patients. One very important topic that is covered in the text is self-induced lung injury as this is one of the few therapies widely used by patients at home. I believe this information can be used as a keystone of patient education.

In summary, this textbook belongs in the library of every physician and respiratory therapist. It is an outstanding reference and will add greatly to the education of our students, residents, and fellows in the use of non-invasive ventilation.

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