
Treatment of Refractory Renal Anemia

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Case Collection

 Springer

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Preface

Renal anemia is one of the most common complications in patients with chronic renal insufficiency. It not only affects the patient's quality of life but also induces high mortality and socioeconomic burden. In the past few decades, the treatment of renal anemia has been significantly shaped by the emergence of human recombinant erythropoietin and iron supplements, the former is also called as erythropoietin-stimulating agents (ESAs). They significantly reduced the requirement for blood transfusions, consequently improving patients' quality of life. Despite the use of high-dose ESAs, many patients still face significant clinical challenges, including difficulty in achieving target hemoglobin levels. On the other hand, the inconvenience of ESAs as an injective form also restricts their use for nondialysis patients. More importantly, a number of patients with renal anemia are hyporesponsive to ESA therapy and even develop pure red cell dysplasia (PRCA). All of these tough clinical situations of renal anemia are also called refractory renal anemia. Such unmet clinical needs are really challenging issues for both physicians and patients. Fortunately, with the rapid progress of technology, we are continuously witnessing the emergence of innovative drugs for renal anemia, which are able to help doctors overcome this tough clinical challenge. Specifically, the advent of hypoxia-inducible factor proline-hydroxylase inhibitors (HIF-PHI), a novel revolutionary drug for renal anemia, has substantially demonstrated its unique efficacy in the treatment of this disease through a number of solid clinical trials.

This book collected 33 interesting cases with quite complex clinical experience during their journeys to treat renal anemia. We are pleased to share with readers many interesting and unique cases from various regions of China, which indeed partly reflects our experience based on clinical practice. And I believe, though the case may just be the case, but it does enlighten the doctor to have a new idea when they come across a complex situation. In these interesting cases, we are happy to envisage the unique role of HIF-PHI, roxadustat, which played a critical role in the treatment of these difficult cases of renal anemia. This experience has really enriched our knowledge to this new type of drug and motivated us to further explore its potential in the future clinical practice.

Frankly speaking, as the case collection, there are definitely some limitations in its nature. Notably, the cases come from different hospitals, and physicians may have different practice habits or experiences. However, we highly value the spirit they demonstrate when facing puzzling and thorny cases. And the successful stories

for these cases inspire us to put them together to share with our colleagues for their critics and comments, which I believe will be helpful to improve our clinical practice in combating against renal anemia.

Finally, I would like to extend my gratitude to all the authors who contributed their valuable cases and wisdom in treating complicated renal anemia. I would like to express my sincere appreciation to Dr. Neeraja Padmanabhan and Springer Nature for their kind assistance in publishing this book.

Nanjing, China

Bi-Cheng Liu

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