

Navigating Complex Therapeutic Dilemmas: Individualized Care

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Introduction

Managing multiple sclerosis during the COVID-19 pandemic presented unique challenges, particularly concerning treatment initiation, continuation, and immunosuppression risks. The pandemic necessitated careful consideration of disease activity, individual risk factors, and vaccine compatibility, often forcing difficult choices between disease control and infection prevention [1].

Treating anxiety and depression in patients with advanced kidney disease involves complex decisions, as common psychotropic medications can accumulate, causing side effects or interacting negatively with renal therapies. Optimizing mental health interventions requires careful drug selection, dosage adjustment, and often nonpharmacological approaches to improve patient quality of life [2].

Pediatric palliative care faces significant dilemmas, often balancing aggressive treatment aims with comfort and quality of life for children with lifelimiting illnesses. Ethical considerations around withdrawal of care, pain management, and family dynamics add layers of complexity to therapeutic choices, emphasizing shared decisionmaking [3].

Treating chronic hepatitis B involves navigating therapeutic dilemmas such as indefinite treatment duration, potential for drug resistance, and managing patients coinfected with other viruses. Choosing the optimal nucleotide analogue regimen requires considering viral load, liver disease stage, and patientspecific factors to prevent disease progression [4].

Acute encephalitis presents a critical therapeutic dilemma: balancing prompt empirical antiviral therapy with the potential need for immunomodulation and intensive supportive care. The challenge lies in distinguishing infectious from autoimmune causes early, as misdiagnosis can delay specific treatment and impact outcomes [5].

Managing advanced prostate cancer involves difficult choices in treatment sequencing, resistance mechanisms, and quality of life. Emerging therapies add complexity, requiring clinicians to navigate options like androgen receptor pathway inhibitors, chemotherapy, and radioligand therapy, often in dynamic clinical scenarios [6].

Patients with rheumatoid arthritis and high cardiovascular risk present a therapeutic dilemma, as inflammatory disease contributes to cardiovascular burden, and some antirheumatic drugs can have cardiovascular side effects. Tailoring treatment requires balancing potent immunosuppression with cardiovascular safety profiles, aiming to reduce both disease activity and cardiovascular events [7].

The coexistence of chronic kidney disease (CKD) and heart failure with preserved ejection fraction (HFpEF) creates significant therapeutic dilemmas. Medications effective for one condition may be contraindicated or require dose adjustments in the other, complicating treatment strategies and often leading to suboptimal management for both diseases [8].

Managing osteoporosis in elderly patients presents a therapeutic dilemma, specifically in balancing fracture prevention efficacy with potential adverse effects of longterm antiresorptive or anabolic agents. Considerations include polypharmacy, comorbidities, and reduced renal function, demanding individualized treatment plans [9].

Treating venous thromboembolism (VTE) in cancer patients is fraught with therapeutic dilemmas, as cancer itself increases thrombosis risk, and anticoagulant choice must account for bleeding risk, drug interactions with cancer therapies, and disease progression. Personalized approaches are crucial to optimize outcomes [10].

Description

Managing multiple sclerosis during the COVID-19 pandemic presented unique challenges, particularly concerning treatment initiation, continuation, and immunosuppression risks. The pandemic necessitated careful consideration of disease activity, individual risk factors, and vaccine compatibility, often forcing difficult choices between disease control and infection prevention [1]. Pediatric palliative care also faces significant dilemmas, often balancing aggressive treatment aims with comfort and quality of life for children with lifelimiting illnesses. Ethical considerations around withdrawal of care, pain management, and family dynamics add layers of complexity to therapeutic choices, emphasizing shared decisionmaking [3].

Acute encephalitis presents a critical therapeutic dilemma: balancing prompt empirical antiviral therapy with the potential need for immunomodulation and intensive supportive care. The challenge lies in distinguishing infectious from autoimmune causes early, as misdiagnosis can delay specific treatment and impact outcomes [5]. Treating anxiety and depression in patients with advanced kidney disease involves complex decisions, as common psychotropic medications can accumulate, causing side effects or interacting negatively with renal therapies. Optimizing mental health interventions requires careful drug selection, dosage adjustment, and often nonpharmacological approaches to improve patient quality of life [2].

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ejection fraction (HFpEF) creates significant therapeutic dilemmas. Medications effective for one condition may be contraindicated or require dose adjustments in the other, complicating treatment strategies and often leading to suboptimal management for both diseases [8]. Managing osteoporosis in elderly patients presents a therapeutic dilemma, specifically in balancing fracture prevention efficacy with potential adverse effects of longterm antiresorptive or anabolic agents. Considerations include polypharmacy, comorbidities, and reduced renal function, demanding individualized treatment plans [9].

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Patients with rheumatoid arthritis and high cardiovascular risk present a therapeutic dilemma, as inflammatory disease contributes to cardiovascular burden, and some antirheumatic drugs can have cardiovascular side effects. Tailoring treatment requires balancing potent immunosuppression with cardiovascular safety profiles, aiming to reduce both disease activity and cardiovascular events [7]. Treating venous thromboembolism (VTE) in cancer patients is fraught with therapeutic dilemmas, as cancer itself increases thrombosis risk, and anticoagulant choice must account for bleeding risk, drug interactions with cancer therapies, and disease progression. Personalized approaches are crucial to optimize outcomes [10].

Conclusion

Healthcare professionals often face therapeutic dilemmas across various medical conditions, necessitating careful balancing acts between treatment efficacy, patient safety, and quality of life. For instance, managing multiple sclerosis during the COVID-19 pandemic required difficult decisions regarding immunosuppression and vaccine compatibility. Treating anxiety and depression in advanced kidney disease patients demands meticulous drug selection and dosage adjustment due to accumulation risks. Pediatric palliative care presents complex ethical considerations, focusing on balancing aggressive treatments with comfort for children with lifelimiting illnesses. Similarly, chronic hepatitis B treatment involves navigating indefinite durations and drug resistance, with choices dependent on viral load and liver disease stage. Acute encephalitis requires a swift distinction between infectious and autoimmune causes to guide appropriate antiviral or immunomodulatory therapies. Dilemmas also arise in advanced prostate cancer, where clinicians must sequence emerging therapies amidst resistance mechanisms. Patients with rheumatoid arthritis and high cardiovascular risk need tailored immunosuppression that considers cardiovascular safety. The coexistence of chronic kidney disease and heart failure with preserved ejection fraction complicates medication choices, often leading to suboptimal management for both. Osteoporosis management in the elderly involves balancing fracture prevention with potential adverse effects, considering polypharmacy and renal function. Furthermore, treating venous thromboembolism in cancer patients requires careful anticoagulant selection due to heightened bleeding and interaction risks with cancer therapies. These varied scenarios underscore the critical need for individualized, patient-centered approaches to navigate complex medical decisions.

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Conflict of Interest

None.

References

1. Maria Pia Sormani, Mireille Giraudon, Girolamo Disanto, Silvia Haggiag, Luca Prospertini, Maria Pia Radaelli. "Therapeutic dilemmas in the management of multiple sclerosis in the era of COVID-19 pandemic." *J Neurol Neurosurg Psychiatry* 91 (2020):669-672.
2. Ying-Mei Lee, Chun Chung Chan, Fang Yang, Sian Mei Tang, Chun Yuen Kwok. "Therapeutic dilemmas in managing anxiety and depression in patients with advanced kidney disease." *J Renal Care* 47 (2021):169-178.
3. Pamela S Hinds, Lauri A Linder, Cheryl J Bell, Christina T Wong, Jennifer W Mack, Kathleen E Powderly, Mary E Hildenbrand, Brian S Barnett, Justin N Baker. "Therapeutic Dilemmas in Pediatric Palliative Care: A Systematic Review." *J Pediatr Nurs* 50 (2020):20-31.
4. Shiv Kumar Sarin, Manoj Kumar, Ekta Gupta, Rakesh Kumar, Anubhav Jain, Manish Pathak. "Therapeutic dilemmas in the treatment of chronic hepatitis B: The role of nucleos(t)ide analogues." *Clin Liver Dis (Hoboken)* 14 (2019):226-234.
5. Aviad Haramati, Hiral Meghani, Benedict D Michael, Tom Solomon, Anthony Venkatesan. "Therapeutic dilemmas in acute encephalitis: Balancing antiviral treatment, immunomodulation, and supportive care." *Pract Neurol* 21 (2021):204-213.
6. Oliver Sartor, Johann de Bono, Karim Fizazi, Evan Yu. "Therapeutic dilemmas in the management of advanced prostate cancer: Emerging challenges and solutions." *Nat Rev Clin Oncol* 19 (2022):1-15.
7. Frédéric A Houssiau, Raphaël Ritschard, Tomas Soukup, Jean-François Mailleux, Anne-Catherine Van Simaeys, Patrick Durez. "Therapeutic dilemmas in patients with rheumatoid arthritis and high cardiovascular risk: A narrative review." *Front Med (Lausanne)* 8 (2021):651263.
8. Konstantinos Savvatis, Henry J Dargie, Andrew J S Coats, Giuseppe Rosano, Stefan D Anker, Michael M Zieman. "Therapeutic dilemmas in the context of chronic kidney disease and heart failure with preserved ejection fraction." *Eur J Heart Fail* 22 (2020):1111-1120.
9. Serge Ferrari, René Rizzoli, Etienne Cavalier, Patrick Durez, Jean-Marc Kaufman, Jean-Philippe Bonjour. "Therapeutic dilemmas in the management of osteoporosis in elderly patients: Balancing efficacy and safety." *Calcif Tissue Int* 108 (2021):181-192.
10. Gary H Lyman, Eric Boleslawski, Hachem Khoury, Jean-François Mailleux, Jean-François Maimone, Jean-Marc Michiels. "Therapeutic dilemmas in patients with cancer and venous thromboembolism: A review of current evidence." *J Thromb Haemost* 20 (2022):27-40.

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