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BACKGROUND

Rituximab is a monoclonal antibody directed against the CD20 antigen, expressed on the surface of B-lymphocytes. It is labelled for diverse indications in adult patients, although it is commonly used as an off-label treatment for many other diseases including some paediatric disorders.

OBJECTIVES

To describe the patterns of rituximab use in a paediatric teaching hospital.

METHODS

We conducted a retrospective observational study enrolling all patients treated in a pediatric hospital with rituximab from January 2001 to June 2018.

Clinical data were collected from electronic patients' medical record, including: patient age, prescribing services and indication.

RESULTS AND DISCUSSION

145 patients included → median age of 15.4 years, 39% males.

47 Nephrology

- 34 Resistant/refractory nephrotic syndrome
- 13 Organ rejection following a kidney transplant

40 Oncology

- 23 Non-Hodgkin lymphoma
- 14 Paraneoplastic opsoclonus-myoclonus syndrome
- 3 Others

25 Haematology

- 11 Haemolytic anaemia
- 4 Leukaemia
- 4 Hemophagocytic syndrome
- 2 Idiopathic Thrombocytopenic Purpura
- 4 Others

13 Rheumatology

- 4 Juvenile Idiopathic Arthritis
- 4 Systemic Lupus Erythematosus
- 2 Vasculitis
- 3 Others

7 Infectious Diseases

- 7 Epstein-Barr virus infection

12 Neurology

- 9 Autoimmune Encephalitis
- 2 Post-herpes simplex encephalitis
- 1 Others

1 Dermatology

- 1 Steven-Johnson Disease

✓ No unexpected side effects were observed

CONCLUSION

- In our experience, rituximab is mainly prescribed for off-label indications
- It is used in a wide variability of disorders, being renal disease, specifically as a second-line therapy for nephrotic syndrome, the most common indication in the patients studied
- Although some uses are well described, further studies for some indications are necessary to establish a correct safety and efficacy profile in children.

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