

Prescribing pattern of human normal globulin in Hospital Sultanah Nur Zahirah: A 3-year retrospective study

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ABSTRACT

Introduction: Human Normal Globulin, commonly known as Intravenous Immunoglobulin (IVIG), is an effective anti-inflammatory and immunomodulatory treatment for a range of disorders. The list of IVIG indications has grown rapidly, requiring appropriate prescribing guidelines to optimize IVIG utilization. **Methods:** This study aimed to describe the IVIG prescribing patterns in terms of indications using the Ministry of Health Medicines Formulary (MOHMF) as a guideline. A retrospective observational study was conducted which included the data collection of all patients prescribed with IVIG from 1st January 2019 to 31st December 2021. **Results:** Collectively, there were 550 patients being prescribed with IVIG. A total of 294 (53.5%) cases complied with the MOHMF indication, with immune thrombocytopenia being the highest indicated case (n=79, 14.4%), followed by neonatal jaundice (n=67, 12.2%) and Kawasaki disease (n=54, 9.8%). Of 256 cases that did not comply with MOHMF, 137 cases were found to have an indication, either per U.S. Food and Drug Administration or European Medicines Agency guidelines. A sum of 126 (22.9%) patients were prescribed IVIG for off-labeled indications, in which the highest indication was for Multisystem Inflammatory Syndrome in Children (MISC). The paediatric department had the highest number of IVIG usage (n=353, 64.2%) followed by medical (n=81, 14.7%), haematology (n=39, 7.1%) and neurology (n=38, 6.9%), respectively. **Conclusion:** This study found a significant proportion of IVIG off-label indications, echoing earlier local publications. There is an urgent need to revise clinical practice and MOHMF recommendations to improve standardization in the use of IVIG in Malaysia.