

中文題目：ABO 血型與克隆氏症的關聯性：一間中台灣醫學中心的研究統計

英文題目：ABO blood groups and Crohn's disease : a hospital-based study in central Taiwan

作者：吳宜樺<sup>1</sup>，賴香君<sup>2</sup>，周仁偉<sup>1</sup>，蔡元耀<sup>3</sup>，陳宗偉<sup>4</sup>

服務單位：<sup>1</sup>中國醫藥大學附設醫院消化內科部，<sup>2</sup>中國醫藥大學附設醫院中醫部，<sup>3</sup>中國醫藥大學附設醫院外科部，<sup>4</sup>亞洲大學附設醫院病理部

**Background:** The variations in ABO blood groups are reported to be associated with multiple disorders. Crohn's disease (CD) is a chronic and relapsing disease of the gastrointestinal tract with unclear etiology. The aim of our current study was to investigate the distribution of ABO blood groups in patients with CD and to explore its impact on disease severity.

**Method:** From January 2000 to November 2021, we retrospectively collected patients diagnosed as CD in our hospital, a tertiary referral center in central Taiwan. Clinical characteristics of patients with CD including gender, age at diagnosis, ABO blood groups, disease phenotype and behavior, operation rate and baseline laboratory data were collected.

**Results:** A total of 75 patients with CD were enrolled into our current study (Table 1). We found out male predominance as 77.3% of all patients. The mean diagnostic age of all CD patients was 40.5 years. Of 75 CD patients, 25 (33.3%) were blood type O, 20 (26.6%) were blood type A, 23 (30.6%) were blood type B, and the remainders 7 (9.3%) were blood type AB. However, there was no significant association between the ABO blood groups and CD patients compared to general population of Taiwanese ( $p > 0.05$ ) (Table 2). In the subgroup analysis of each blood type, there were no significant difference of disease location and operation rate between groups. Furthermore, blood type B CD patients had higher C-Reactive Protein level compared to blood type O patients ( $p = 0.0491$ ). Blood type O CD patients had the lower C-Reactive Protein level compared to non-O groups ( $p = 0.0289$ ) (Table 3). In the analysis of age groups, 60.64% of the aged 40 years or more ( $n = 51$ ), while 30.73% aged below 40 years ( $n = 24$ ). The differences between these two age groups were statistically significant. Most of CD patients are older than 40 years.

**Conclusion:** ABO blood groups are not associated with the prevalence of Crohn's disease. Most of CD patients are older than 40 years. In addition, CD patients with blood type O had lower baseline CRP.