

中文題目：對微小病變腎臟病造成之頻繁復發的腎病症候群，利用莫須瘤治療後達到完全緩解

英文題目：Complete remission of frequently relapsing nephrotic syndrome in minimal-change disease with rituximab

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Introduction: Minimal-change disease (MCD) is mostly present with nephrotic syndrome (NS) and responsive to the steroid therapy. However, about 30% of adults display ‘steroid dependency,’ with recurrences soon after steroid discontinuation or during the tapering phase of the treatment. So immunosuppressant would be added on to reduce relapse frequency. Rituximab still has ongoing trial to prove the effects. We presents a case of complete remission after rituximab use.

Case presentation: A 23-year-old male who was diagnosed as minimal change disease with NS by renal biopsy. The initial urine protein creatinine ratio was 6.75 with hyperlipidemia, Total cholesterol = 355 mg/dl, Triglyceride = 121 mg/dl and hypoalbuminemia (Albumin = 1.7g/dl). He had steroid dependency and frequently relapsing NS. Immunosuppressant including cyclophosphamide, mycophenolate mofetil or cyclosporine had been tried without to achieve complete remission in past 5 years. Due to frequently relapsing severe nephrotic proteinuria after steroid tapering, he received rituximab 500mg intravenously weekly for 4 doses combined with steroid use. Complete remission of NS was achieved in 24 days and steroid was discontinued. No relapsing and side effect were noted thereafter.

Discussion: Rituximab, a chimeric monoclonal antibody targeted against the B-cell marker CD20, was used for autoimmune disease and hematologic malignancy as its initial entity. Cell destruction is activated by rituximab binding to CD20 include direct signaling of apoptosis, complement activation and cell-mediated cytotoxicity. Today, it treats disease via more extend entity. Kidney Disease: Improving Global Outcomes (KDIGO) 2012 guideline suggest frequently relapsing or steroid-dependent MCD in adult to receive cyclophosphamide, calcineurin inhibitor or mycophenolate mofetil but no clear evidence for rituximab use. The trials for rituximab in MCD were reported sporadically since 2007 and retrospective studies have shown no relapsing or remission after rituximab. The response rate was about 65~78%. Once the recurrence was noted, elevated B cell counts might be the hint of the pathogenesis. We introduced a case of complete remission with free of medication after rituximab use. So rituximab could be considered as one alternative therapy for patients with frequently relapsing minimal-change disease with NS.

Keyword: Rituximab, Minimal-change disease, Nephrotic syndrome.

關鍵字：莫須瘤，微小病變腎臟病，腎病症候群。