497

Long-term follow up of a steroid-minimising regimen for remission-induction in ANCA associated vasculitis

Dr Stephen Mcadoo[1], Dr Ruth Pepper[2], Dr Sally Hamour[2], Dr Aine Burns[2], Prof Mark Little[3], Dr Thomas Cairns[1], Prof Alan Salama[2], Prof Charles Pusey[1]
[1]Imperial College London, London, United Kingdom, [2]University College London, London, United Kingdom, [3]Trinity College Dublin, Dublin, Ireland

Background:
Glucocorticoids (GCs) are a mainstay of treatment for patients with ANCA-associated vasculitis (AAV), though they are associated with significant adverse effects. We have previously reported successful short-term outcomes using a GC-sparing induction and maintenance regimen. Here, we report longer term outcomes in an extended cohort of patients treated with this protocol.

Methods:
Patients with new or relapsing AAV were treated at two centres with the combination of rituximab (RTX) 2x1g, six low-dose i.v. cyclophosphamide (CYC) pulses, and a short course of oral GC of less than two weeks duration, followed by maintenance azathioprine or MMF. Data are reported as median ± IQR unless otherwise stated.

Results:
To date, 58 patients (57% female, median age 65 [54-70] years) with new (84%) or relapsing (16%) AAV have been treated with this regimen, with average follow up of 37 (23-46) months. 65% of patients were positive for MPO-ANCA, 29% for PR3-ANCA, 5% ANCA negative. BVAS and CRP at presentation were 14 (12-19) and 45 (11-90) mg/L, respectively. 90% had biopsy-proven renal involvement, with creatinine (sCr) 176 (131-270) µmol/L and urine protein:creatinine ratio (uPCR) 152 (77-289) mg/mmol. All patients received rituximab, 95% received cyclophosphamide, and the median dose of delivered GC during induction was 960 (781-1276) mg. Five patients (9%) required re-introduction of GC during the first six months for disease control; all patients subsequently achieved remission by 6 months. At one year, the average sCr had improved to 109 (83-167) µmol/L (ΔsCr 56 [8-112] µmol/L), and the average uPCR fell to 34 (12-93) mg/mmol (ΔuPCR 96 (40-233) mg/mmol). Long-term patient and renal survival are summarised in Figure 1A. At 3 years, 96% of patients were alive, of whom 95% had independent renal function. 19% of patients experienced disease relapse by this time point, however the majority of the cohort (80%) remained free of long-term GC (Figure 1B).

Conclusions:
Rapid GC withdrawal appears to be safe and effective for the majority of patients following induction treatment with RTX and CYC. Long-term patient and renal survival and relapse rates appear favourable to published cohorts treated with standard GC. A small proportion of patients required early re-introduction of GC, such that careful monitoring is required during induction treatment. However, GC avoidance was possible in the majority of cases. Controlled studies are warranted to test the efficacy of this regimen to current standards of care.