

BACKGROUND

Information about treatment of IgA nephropathy (IgAN) showing progressive deterioration of kidney function is scarce. We designed a therapeutic protocol with corticosteroids (CS) plus mycophenolate mofetil (MMF) in this type of patients. Here we report on the results of the first 13 patients who received this treatment.

METHODS

Included in the protocol were 13 patients with biopsy-proven IgAN showing a progressive decline of renal function (GFR decline of $30 \pm 9\%$ during the previous 6 months before treatment). All of them were receiving renin-angiotensin blockers that were maintained during immunosuppressive therapy. Treatment consisted of oral prednisone (1 mg/Kg/d in the first month, 0.5 mg/kg/d in the second month, tapering doses during the third month to maintenance therapy with 5-10 mg/d for 9 ± 4 months and MMF (1-2 g/d, according to digestive tolerance) for a total duration of 21 ± 14 months. A linear regression model was used to calculate the slope of GFR. Non-parametrical tests were used to compare the slope of GFR and proteinuria changes after treatment.

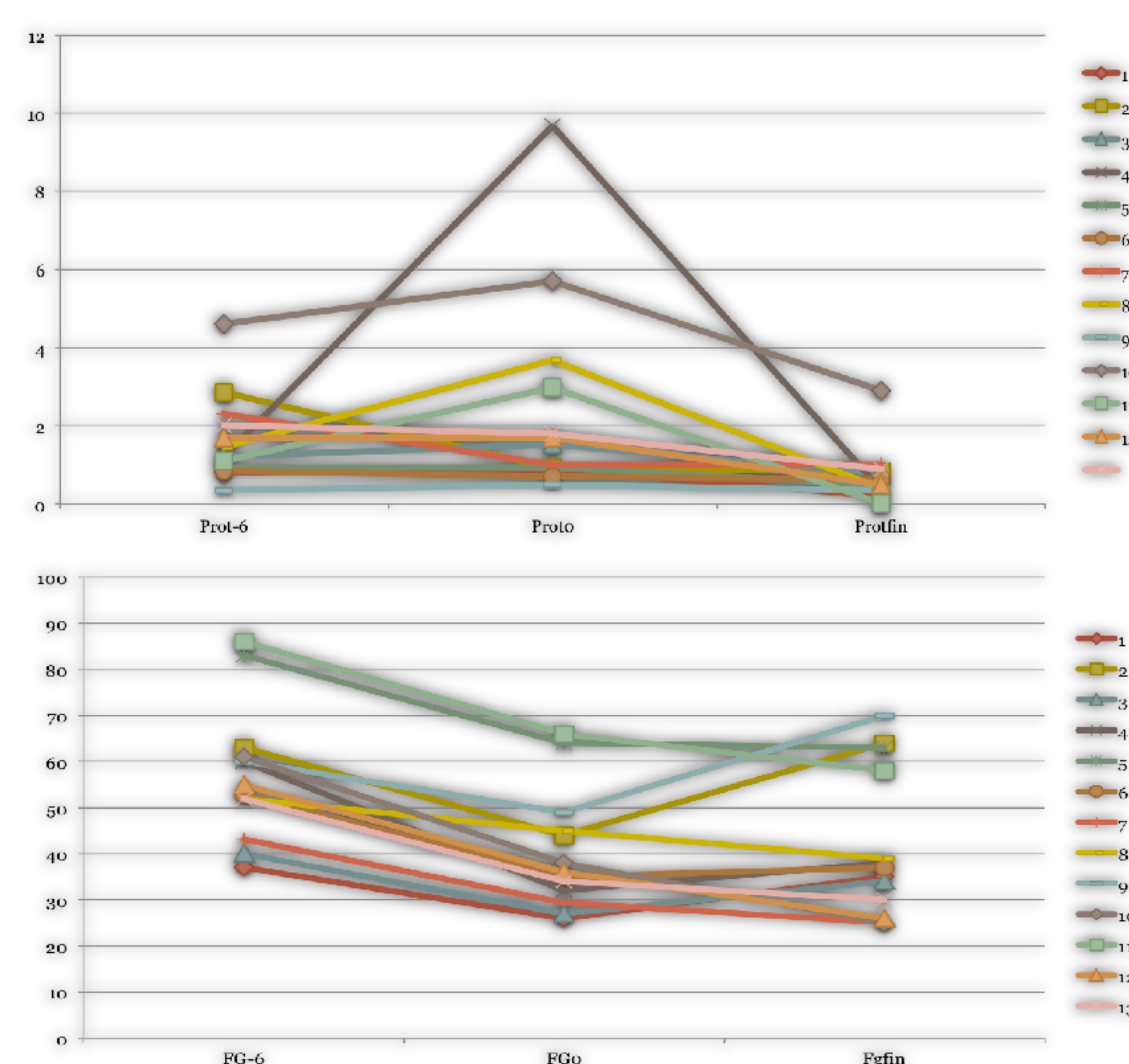
RESULTS

All the patients but one (Asian origin) were Caucasians; there were 8 men and 5 women. Age at baseline (onset of treatment) was 48 ± 13 years, serum creatinine 1.81 ± 0.33 mg/dl, and eGFR 40 ± 13 ml/min/1.73m² (CKD-EPI). Mean 24hr urine protein excretion was 2.5 ± 2.6 g/day and all the patients showed microhematuria. A significant change was found when comparing eGFR slope during the 6 month-period before treatment (-2.82 ± 0.93 ml/min/month) with eGFR slope during CS+MMF treatment ($+0.24 \pm 0.74$ ml/min/month; $p=0.001$). Proteinuria showed a significant decline after treatment (2.5 ± 2.6 to 0.71 ± 0.72 g/day, $p=0.002$). The amount of microhematuria (52 ± 39 erythrocytes per h.p.f) showed a significant decline in all the patients, and hematuria disappeared in 11 patients. Follow-up after CS+MMF withdrawal was 34 ± 33 months. eGFR slope during this post-treatment period was $+0.07 \pm 0.32$ ml/min/month and proteinuria remained stable in comparison with the treatment period. CS+MMF were well tolerated. Adverse effects included herpes zoster infection in 1 patient and mild gastrointestinal disturbances in 3 that did not require treatment withdrawal. No patient developed diabetes or other serious side effects

VARIABLES

Nº Patients	13
Sex	8 Men y 5 Women
Race	12 Caucasian y 1 Asian
Age	48 ±13 years
Cr serum	1.81±0.33 mg/dl
GFR	40±13 ml/min/1.73m ²
Proteinuria	2.5±2.6 g/day
Nephrotic S.	1 pacient
IECA/ARA	100%
Hematuria	52±39 hpc
HTA	61,5%
TAS/TAD	131,1±16,4/ 75±17 mmHg

Variables	-6month	StartTto	StopTto	
Cr (mg/dl)	1,3±0,2	1,8±0,33	1,6±0,4	0,055
GF (ml/min/1.73m ²)	57,3±14,5	40,4±12,8	44,2±14,3	0,116
Proteinuria (g/día)	1,6±1,5	2,4±2,6	0,7±0,3	0,003
Hematuria (hpc)	42	52	6	0,001



CONCLUSION

The combination of CS and MMF for 1-2 years, both administered at relatively low doses, was effective to halt the progression of renal insufficiency in a selected group of IgAN with deteriorating renal function, and was well tolerated. Prospective controlled studies are needed to confirm our results.

