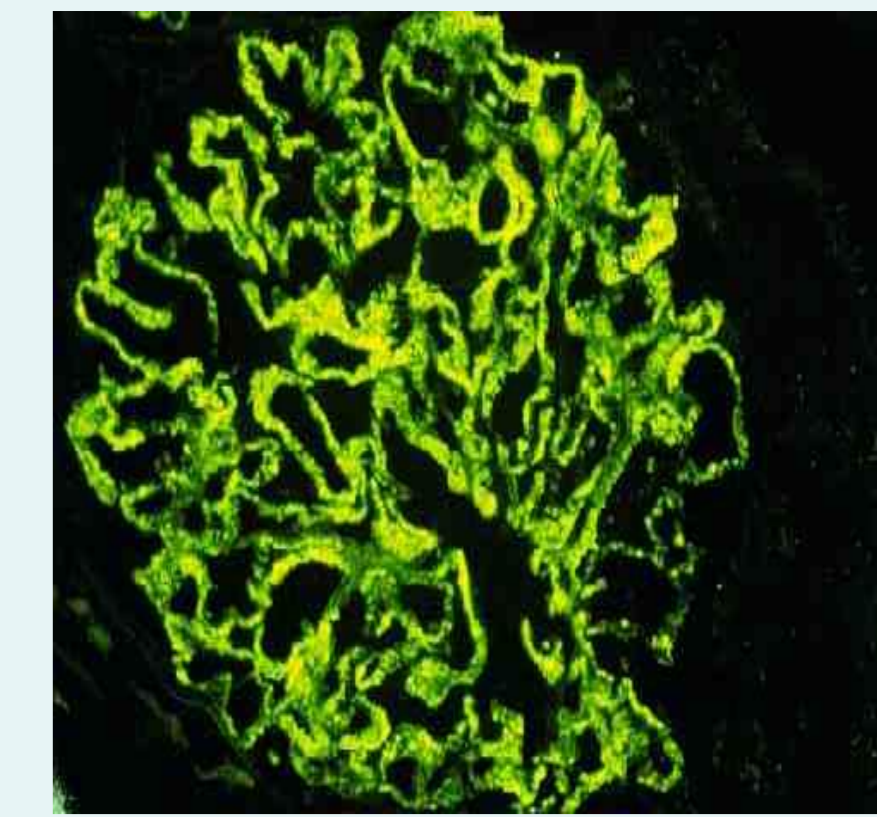


# LONG TERM FOLLOW UP OF PATIENTS WITH IDIOPATHIC MEMBRANOUS NEPHROPATHY. EVALUATION OF PROGRESSION AND OUTCOME OF THE DISEASE IN RELATION TO IMMUNOSUPPRESSIVE OR NO THERAPY.

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## INTRODUCTION AND AIMS

- Long term evaluation of progression and outcome of patients with idiopathic membranous nephropathy (IMN) in relation to immunosuppressive or no treatment.

## METHODS (Table 1)

- We studied retrospectively 61 (40 male) patients (pts) with IMN who were followed in our department for 84 ± 55 months (mean ± SD, median= 72). They were 61 ± 15 years old (mean ± SD)
- with :
  - ❖ initial proteinuria of 6.2 ± 3.4 g/day and
  - ❖ estimated GFR 79 ± 30 ml/min/1.73 m<sup>2</sup>.
- At the beginning and for 6 months they were treated conservatively [ RAAS inhibitors, statins, low protein diet (0.8 gr per kg body weight plus protein losses) and less than 5g of salt].
- In those who had no remission of proteinuria (54 of 61 pts) treatment was modified
  - with cyclosporine (CYA), 2 mg/kg for 18- 24 months plus low dose prednisolone 0.15mg/kg for the first 6 months,
  - with Ponticelli scheme in 24 pts (alternative treatment of steroids 0.5mg/kg plus cyclophosphamide 2mg/kg)
- When there were relapses of the nephrotic syndrome a new treatment was given with CYA or Ponticelli scheme alternatively in those where this treatment had not been given before. Five pts with resistant nephrotic syndrome received treatment with rituximab.
- **REMISSION** was considered as the reduction of proteinuria i.e.< 300mg/day **complete**, between 300 mg – 3.5 g/day **partial**, as also the reduction of edema and hypoalbuminemia . **RELAPSE**, was considered as the recurrence of proteinuria > 3.5 g / day.

Table 1. Epidemiology and clinical features of patients with IMN	
Number of pts	61
Male	40
Female	21
Age (years old)	61 ± 15
Months of following up	84 ± 55
Initial proteinuria (g/day)	6.2 ± 3.4
Estimated GFR ml/min/1,73 m <sup>2</sup>	79 ± 30

Figure 1. Results of immunosuppressive treatment

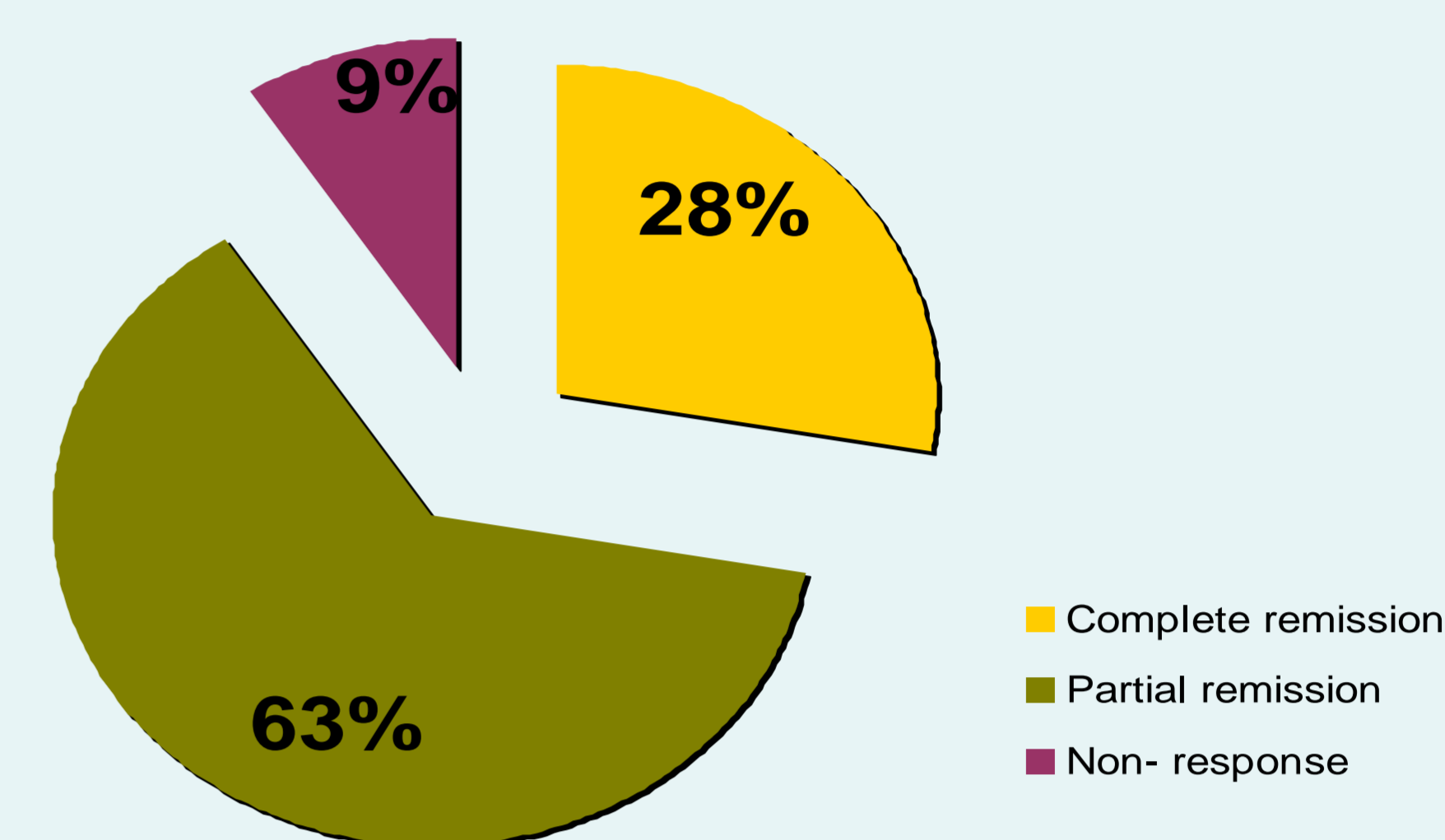


Figure 2. Initial proteinuria /day

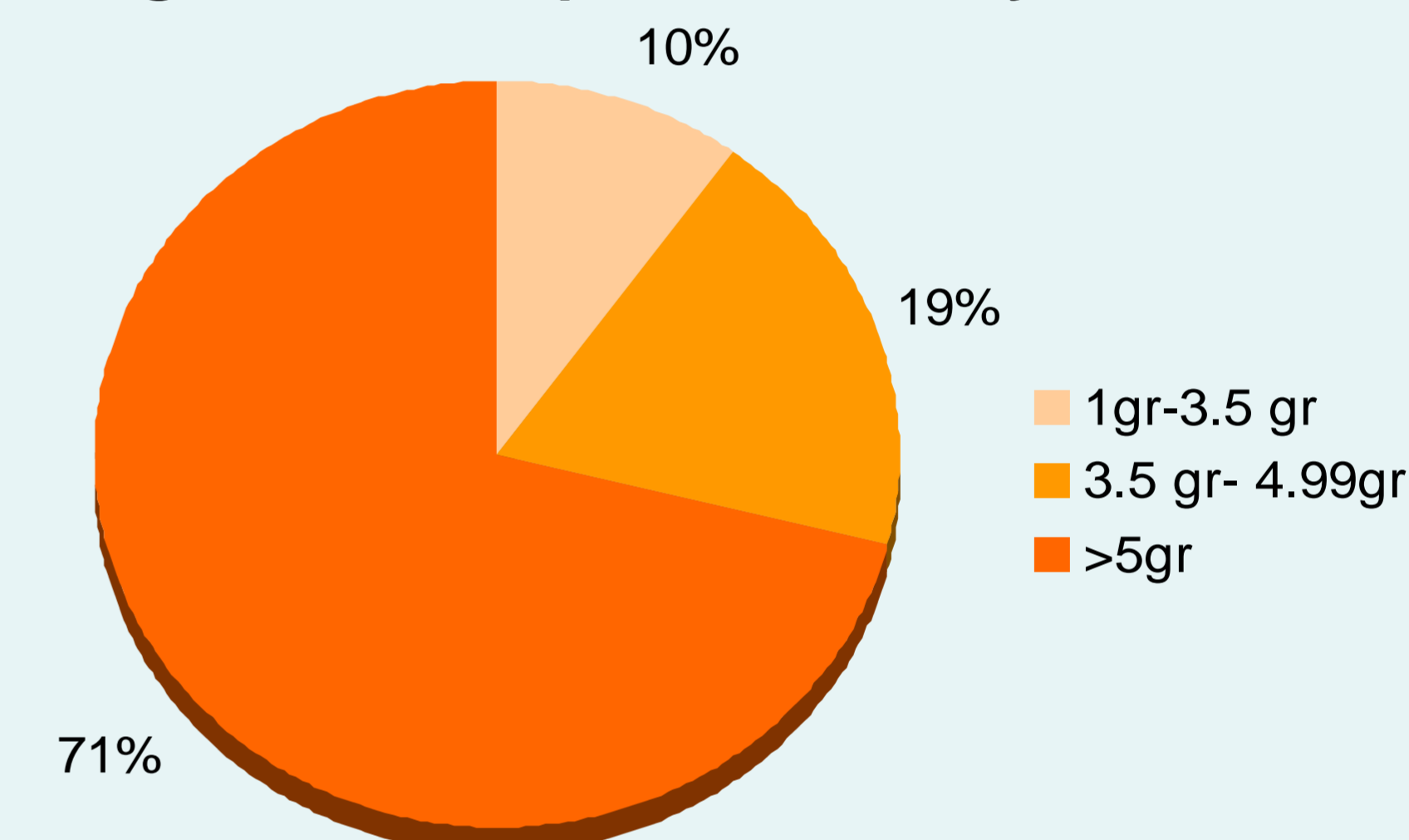
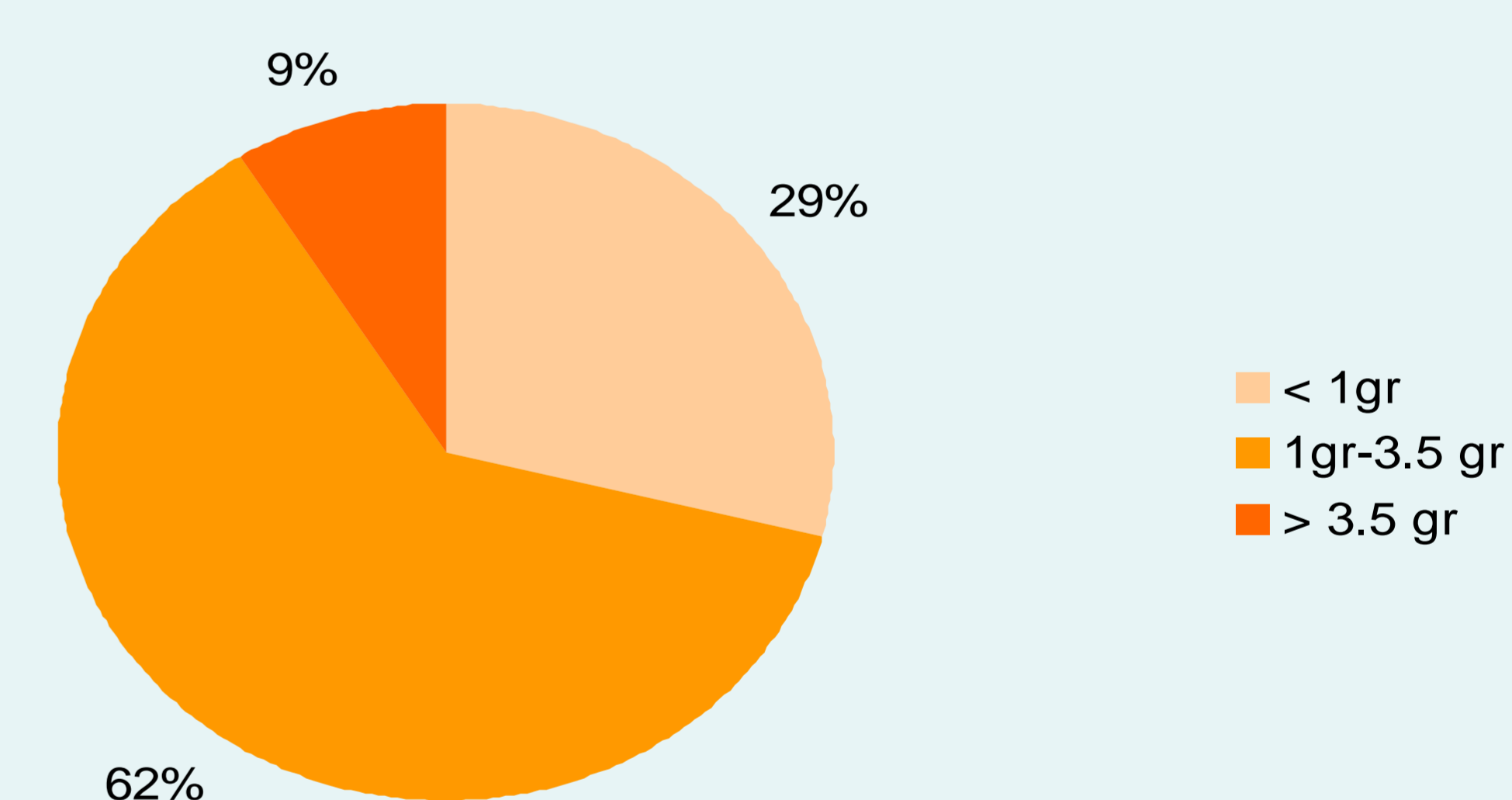


Figure 3. Final proteinuria/ day



## RESULTS ( 1-4)

- 3 pts had complete remission and 4 had partial with proteinuria less than 2gr/d without any immunosuppressive treatment (12%).
- From those who received immunosuppressive treatment (54), 15 had complete remission (28%) and 34 (63%) partial remission (proteinuria less than 3g/d).
- There were 52 relapses of nephrotic syndrome
  - 29 after CYA treatment
  - 23 after Ponticelli treatment
- 4 pts had side effects with treatment:
  - 2 developed respiratory tract infection recovered completely
  - 1 had an episode of hemorrhagic cystitis due to cyclophosphamide treatment
  - 1 developed pancreatitis with a positive outcome
- Final outcome at the end of follow up (January 2017)
  - 56 under remission (18 complete, 38 partial)
  - 3 developed end stage renal disease (ESRD)
  - eGFR was reduced to 69 ± 28 ml/min/1.73m<sup>2</sup>
  - 2 died from cardiovascular disease

## CONCLUSIONS

- There was a complete or partial remission under simple conservative treatment in 12% of these pts with severe nephrotic syndrome.
- Immunosuppressive treatment led to partial or complete remission in 90% of the pts
- There were no severe side effects related to therapy
- Cyclosporine treatment was related more frequently to relapse of the disease after its discontinuation, while clinical outcome of all pts was satisfactory
- All pts who commenced treatment with rituximab are in partial remission

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