Background and Objectives:
In 2009 a collaborative multihospital task-force was established in Castilla la Mancha (Spain) in order to investigate and compare the progression and outcome of the more frequent biopsied GN between 01/01/1994 and 31/12/2008 and followed up to 06/30/2011. Five categories which accounts for 60% of biopsied patients were selected (n=852)

Objectives
1. To estimate the kidney and patient survival in adult patients with histologically proven: Focal Segmental Glomerulosclerosis (FSGS), Membranous nephropathy (MN), IgA nephropathy (IgAN), Lupus Nephritis (LN) and Crescentic type III glomerulonephritis (CGNIII). 2. To assess the influence of initial demographic and biological circumstances in renal and patient outcomes.

Table I: Biological and demographic features

<table>
<thead>
<tr>
<th>Dx</th>
<th>N°</th>
<th>Age (years) (x SD)</th>
<th>% Fem</th>
<th>MDRD4 (x SD) ml/min</th>
<th>Prt24 h (g) (x SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSF</td>
<td>179</td>
<td>48.2 15</td>
<td>29.1</td>
<td>47.0 26</td>
<td>4.5 4.5</td>
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<tr>
<td>GNM</td>
<td>177</td>
<td>52.8 16</td>
<td>40.7</td>
<td>68.6 33</td>
<td>8.2 4.9</td>
</tr>
<tr>
<td>GNA</td>
<td>204</td>
<td>42.6 15</td>
<td>18.1</td>
<td>50.5 30</td>
<td>3.6 9.1</td>
</tr>
<tr>
<td>GRPII</td>
<td>137</td>
<td>60.5 13</td>
<td>44.5</td>
<td>18.3 16</td>
<td>2.0 1.9</td>
</tr>
<tr>
<td>GNL</td>
<td>155</td>
<td>34.6 14</td>
<td>80.6</td>
<td>67.6 30</td>
<td>3.5 3.2</td>
</tr>
</tbody>
</table>

Patients and Methods

Renal and patient outcome were estimated by survival analysis methods being events of interest ESRD or death predialysis for renal survival, and death before or after renal replacement therapy (RRT) for patient survival. Actuarial and Kaplan-Meier estimates were used to compare crude survival between diagnostic categories (Gehan and Log rank) and Cox regression to assess adjusted influence of age, sex, GN type, initial eGFR and proteinuria.

Results:
The median follow-up from biopsy to predefined patient and renal outcome (6252 and 5497 patient/year of follow-up) were 6.89 and 5.80 years (range 0.01-17.5). Cumulative (SE) renal survival (Fig1) (alive and free of ESRD) after 5 and 10 years was: 75 3 and 57 4 in FSGS; 83 3 and 75 4 in MN; 76 3 and 66 4 in IgAN; 93 2 and 90 3 in LN, 55 5 and 43 5 in CGNIII. Log rank test showed significantly difference (p<0.01) between categories except IgAN vs FSGS. Cox regression shows independent predictive influence of age, sex, initial eGFR and proteinuria, and LN histological diagnosis (CGNIII as reference category).

Cumulative (SE) patient survival (Fig2) (alive in or out of RRT) after 5 and 10 years was: 96 2 - 86 4 in FSGS; 91 3 - 83 4 in MN; 95 2 - 92 3 in IgAN; 96 2 - 93 3 in LN, 69 5 and 57 6 in CGNIII. Log Rank test showed CGNIII as the worse (significantly difference vs all categories) followed by MN being LN the best prognostic diagnosis. After Cox regression adjustment, only age, sex and initial eGFR show independent predictive influence losing it the diagnostic categories and initial proteinuria.

Conclusions:
The observed figures are not different from those reported in recent medical literature except for a worse renal survival in IgAN which could be attributed to a selection bias due to restrictive biopsy indication criteria for this condition in our context.

References:

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