

FCGG Renal Biopsy Network: first epidemiological report on pediatric renal disease in Flanders

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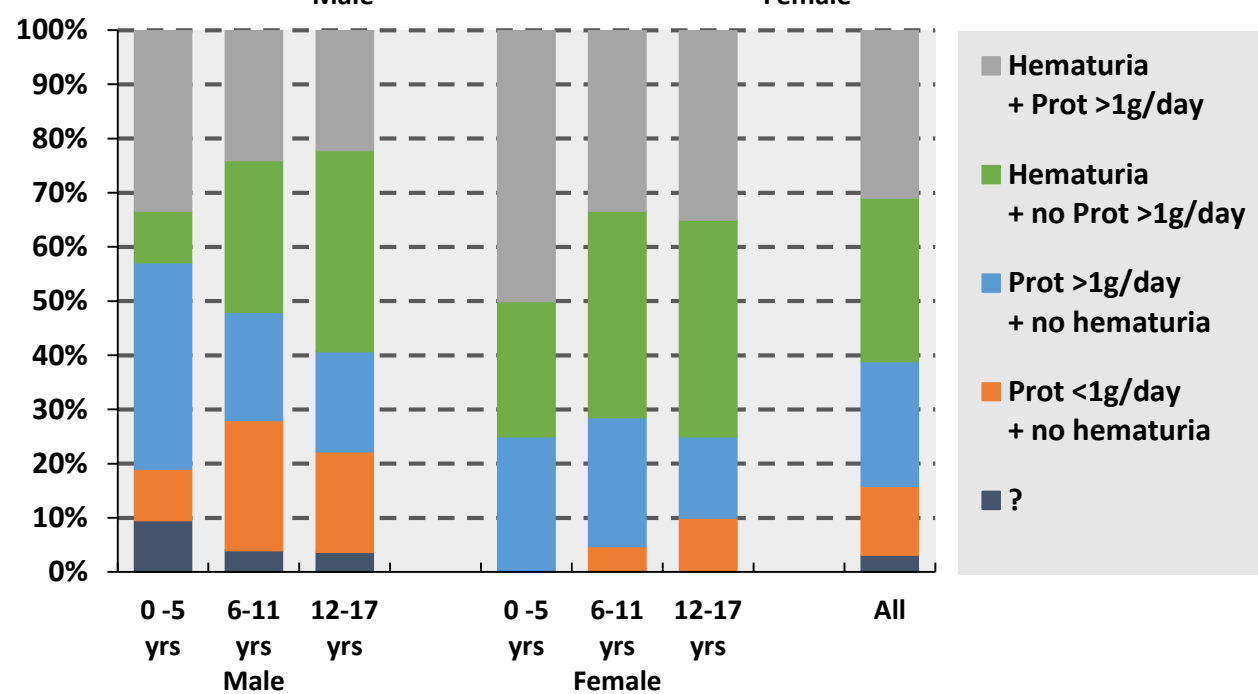
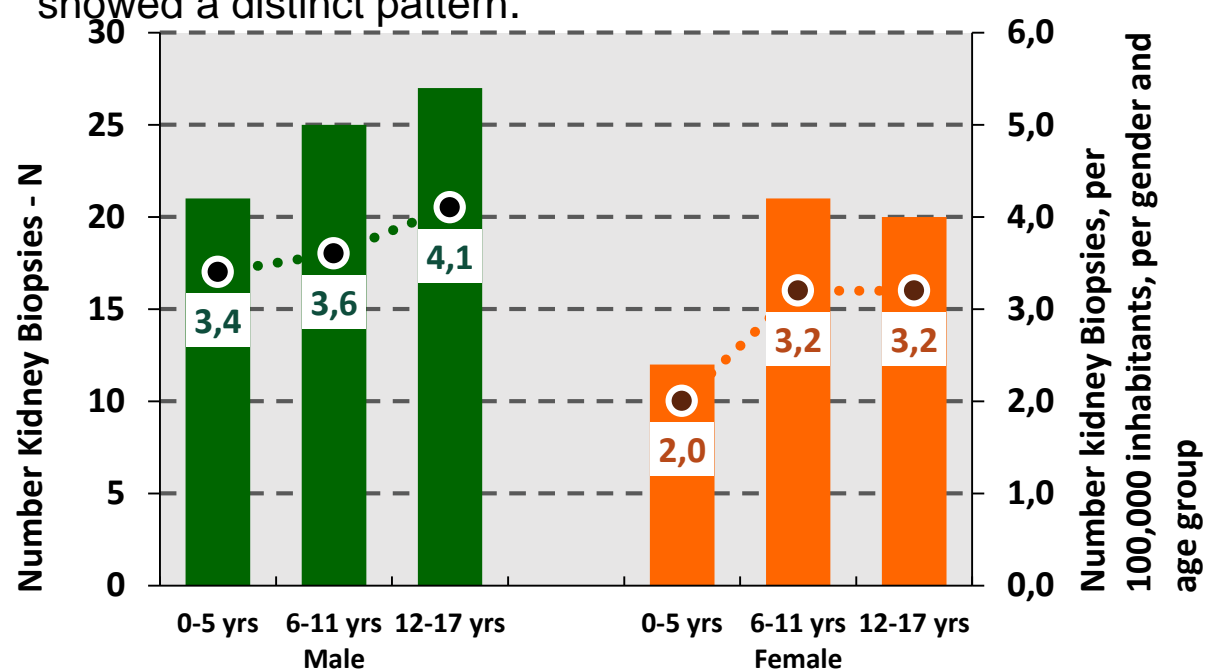
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Introduction

- ❖ The Flemish Collaborative Glomerulonephritis Group (FCGG) was founded in 2016 as a collaboration between renal pathologists and nephrologists, within NBVN organization.
- ❖ The Renal Biopsy Network project consists of the registration of all native kidney biopsies within NBVN, uniformly collecting and/or using
 - basic patient data
 - semi-structured information on the kidney disease
 - a well-structured histopathology report
 - a comprehensive diagnosis list of kidney pathology, newly designed for this project
 - the ERA-EDTA clinical renal diagnosis list.
- ❖ All information is entered and monitored by 3 data entry centers.

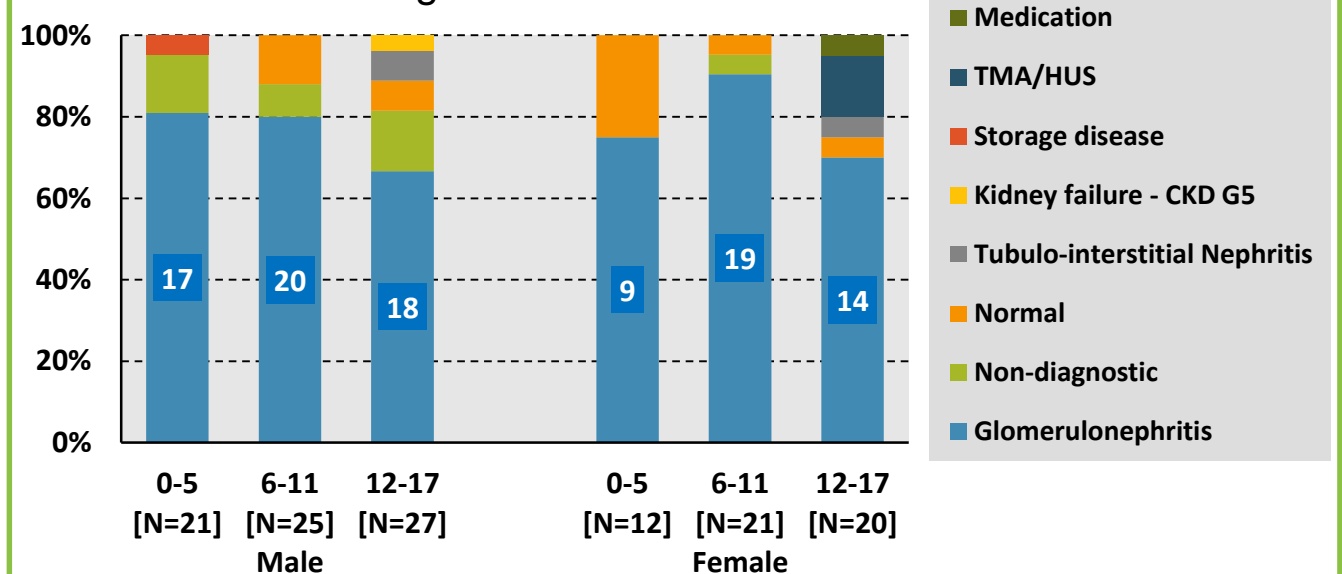
Renal Biopsy Network - registry

- ❖ From January 2017 till December 2019, 2166 native kidney biopsies were registered, or 10.9 per 100,000 inhabitants per year in the Flemish region.
- ❖ 126 biopsies (5,8%) were done in pediatric patients (age <18 years), or 3.3/100,000 inhabitants per year. There were more biopsies in boys (N=73) than in girls (N=53). Kidney disease presented mainly either as proteinuria >1g/day, or hematuria, or hematuria and proteinuria >1g/day; some age/gender categories showed a distinct pattern.

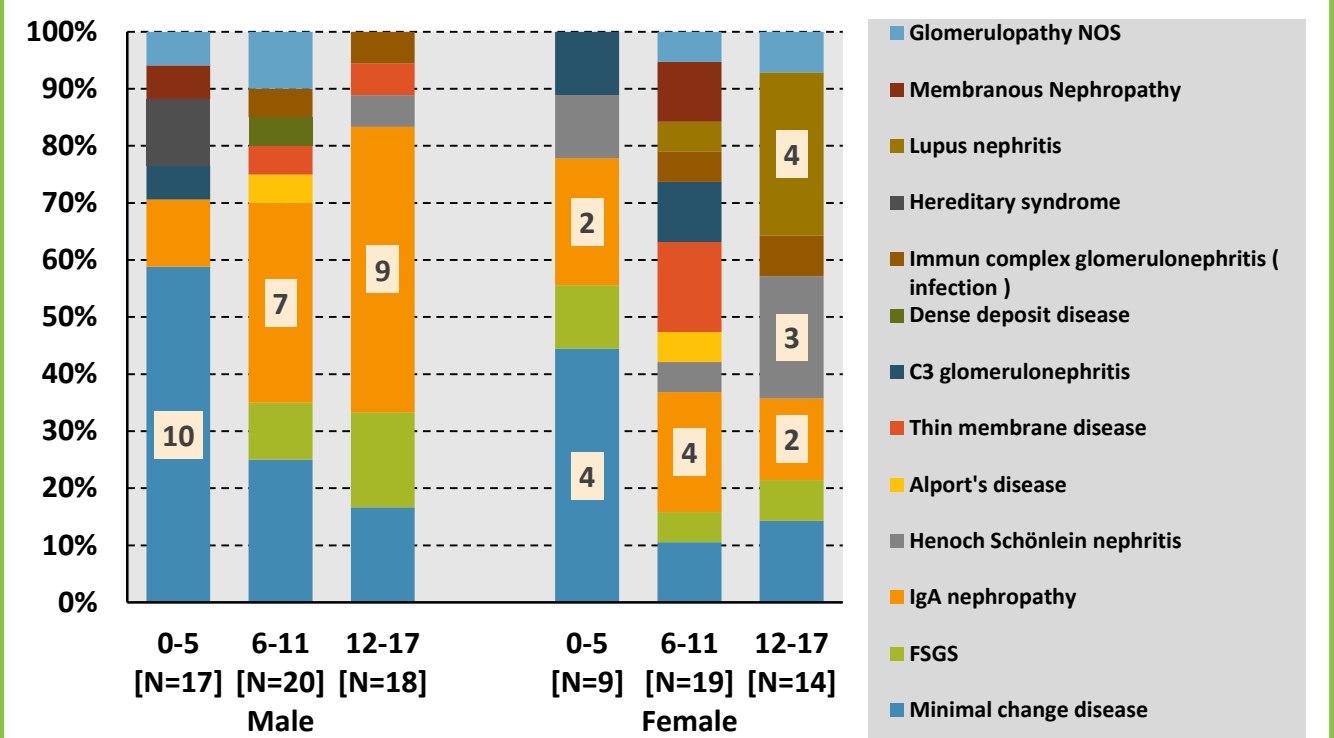


Results

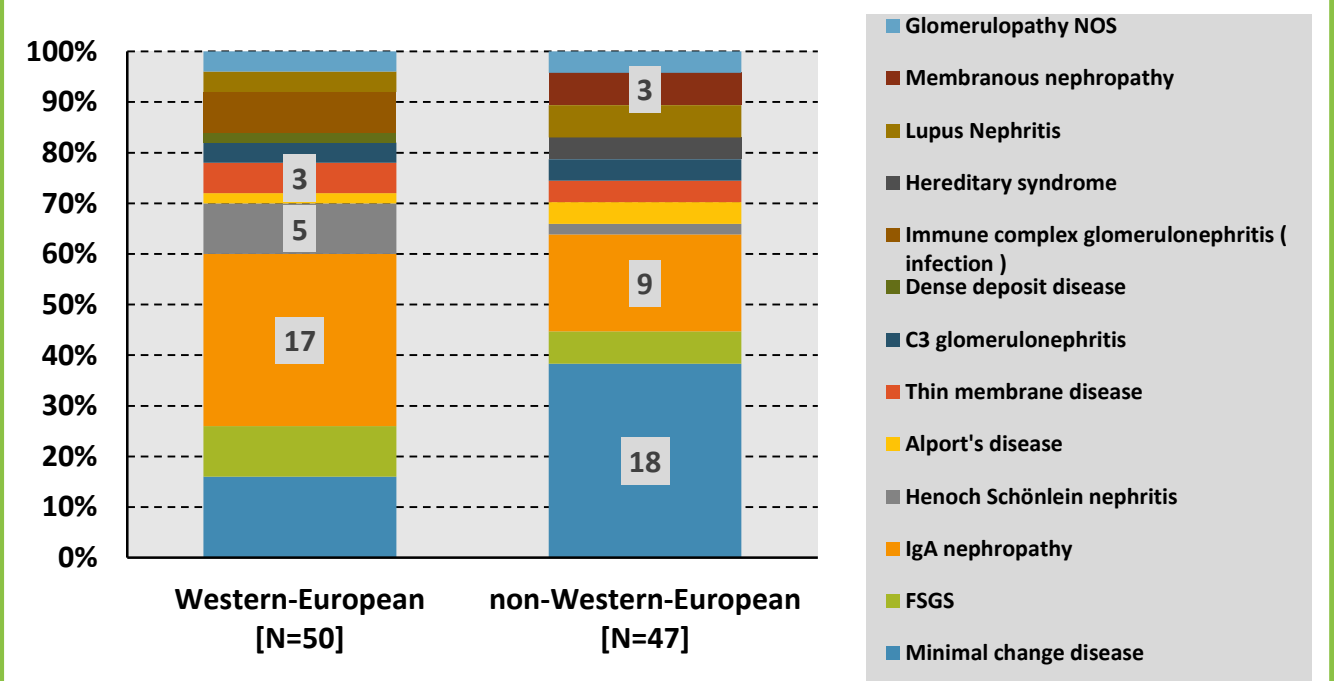
- ❖ In each age/gender group, glomerulopathy [GN] was the most common APD diagnosis – 77%.



- ❖ The APD GN spectrum differed among the age/gender groups.
 - 0-5 years: mainly minimal change disease with a nephrotic syndrome
 - 6-11 years: mainly diseases with hematuria, such as IgA-mediated diseases and Glomerular Basal Membrane related-diseases
 - 12-17 years: greater impact of gender =
 - Boys: IgA- and GBM mediated nephritis
 - Girls: more diverse collection of kidney diseases



- ❖ Children of Western-European descent presented with hematuric GN diseases, whereas those without a Western-European descent suffered from proteinuric GN diseases.



Conclusion

- The FCGG network provides an excellent format for cross-talk between renal pathologists and nephrologists.
- For the first time reliable estimates of pediatric renal diseases based on histology are available.
- Efforts to coordinate clinical care of pediatric nephrology in the NBVN region are ongoing.
- Due to the diverse renal spectrum of the teenager group, a renal biopsy may have an added value.