



SYMPTOM BURDEN AMONG IMMUNOGLOBULIN A NEPHROPATHY (IGAN) PATIENTS IN A US REAL-WORLD SETTING

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Poster Number: **PO1578**

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Introduction

- Immunoglobulin A nephropathy (IgAN) is the most prevalent chronic glomerulonephritis. 15-40% of IgAN patients will progress to kidney failure within 10-20 years after diagnosis^{1,2} and there is no targeted therapy for this disease
- The symptomatic burden has not been well described in IgAN patients

Study Objective

The aim of this study is to describe the symptom burden among IgAN patients in the US real world setting

1 Radford MG, Donadio JV, Bergstralh EJ, Grande JP. Predicting renal outcome in IgA nephropathy. American Society of Nephrology. 1997;8(2):199-207.

2 Donadio JV, Grande JP. IgA Nephropathy. The New England Journal of Medicine. 2002;347(10):738-748.

Methods

- This is a descriptive, retrospective study of adult (≥ 18 years) IgAN patients in the Optum® de-identified Electronic Health Record dataset (EHRs) between January 2007 and December 2019; this dataset contains clinical/medical administrative data from 96 million people in 50 states
- As there are no IgAN-specific ICD codes, patients with ≥ 2 records of 'IgAN' without any general secondary or negative notion in physician notes were selected; a record of kidney biopsy was also required:
 - Patients without a record of renal biopsy, valid eGFR and proteinuria levels, or with a history of ESKD/kidney transplant were excluded
- Baseline demographic and clinical characteristics, including diagnosed symptoms of interest (captured via the relevant ICD codes) up to 12 months before/at the index date (1st IgAN record) are presented

ICD = International Classification of Diseases

Results

- The final cohort included 846 patients with a mean age of 48.5 years; 57.7% were male and 7.0% Asian
- Proteinuria levels of ≥ 1 g/day were found in 35.7% of patients. The median eGFR was 39.0 ml/min/1.73m² and 20.8% of patients had severe deterioration of kidney function (eGFR <15)

Demographics	N (%)
Overall Patient Number	846 (100.0)
Age	
Mean (SD)	48.5 (15.99)
Gender	
Female	358 (42.3)
Male	488 (57.7)
Race	
White	640 (75.7)
African American	71 (8.4)
Asian	59 (7.0)
Other/Unknown	76 (9.0)

Results cont.

- Overall, more patients in higher chronic kidney disease (CKD) stages experienced pain, fatigue and/or edema but this trend was not as consistent for higher proteinuria levels

Clinical Characteristics	N (%)
eGFR (ml/min/1.73m²)	
≥ 90	124 (14.7)
60-89	141 (16.7)
45-59	125 (14.8)
30-44	116 (13.7)
15-29	164 (19.4)
<15	176 (20.8)
Median (Q1, Q3)	39.0 (18.0, 70.0)
Proteinuria (g/d)	
<0.5	284 (33.6)
0.5-<1	260 (30.7)
1-2	253 (29.9)
>2	49 (5.8)

Results cont.

Symptom*	eGFR (mL/min/1.73m2)	Proteinuria		Total	
		<1g/day	>1g/day		
Pain (multiple causes/locations)	>45	44.1% (n= 281)	38.5% (n= 109)	42.6% (N= 390)	} <20%
	44-15	50.3% (n= 167)	46% (n= 113)	48.6% (N= 280)	
Fatigue	>45	16.4% (n= 281)	12.8% (n= 109)	15.4% (N= 390)	} 20-40%
	44-15	13.8% (n= 167)	23% (n= 113)	17.5% (N= 280)	
Edema	>45	11.4% (n= 281)	38.5% (n= 109)	19% (N= 390)	} >40%
	44-15	21% (n= 167)	28.3% (n= 113)	23.9% (N= 280)	

*Captured via the International Classification of Diseases (ICD) diagnostic codes

Conclusions

- Pain, edema and fatigue were prevalent across ranges of both CKD severity and proteinuria; with some exceptions, symptom burden increased with lower eGFR
- The overall findings suggest that a relatively large proportion of IgAN patients, even those with preserved kidney function experience substantial symptomatic burden