# Case Presentation Challenges in Transition

Nakysa Hooman Professor

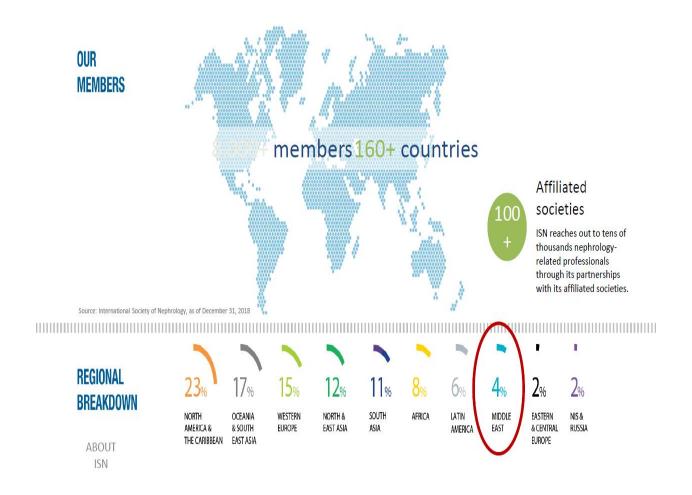
Pediatric Nephrology
Iran University of Medical Sciences

The International Society of Nephrology (ISN) is a philanthropic organization **advancing kidney health worldwide** for all its stakeholders by



ABOUT ISN

## THE ISN COMMUNITY

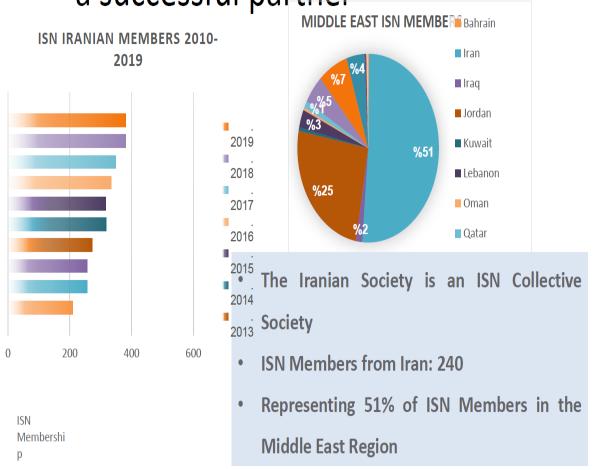


# Iranian Society of Nephrology,





a successful partner



## What's in ISN for our members?



Science	Education	Peer-to-peer exchange
<ul> <li>ISN's publications:</li> <li>Kidney international (KI)</li> <li>KI Supplements</li> <li>KI Reports (online only)</li> </ul>	ISN Academy  Reduced registration fee for ISN events: WCN, Frontiers &	Join colleagues from all over the world at ISN events &create a global network
<ul><li>Seminars in Nephrology</li><li>Manuscripts</li></ul>	pre-congress courses	Participate in online forums through ISN Academy
Contribute to the scientific agenda	Training opportunities via ISN Programs	Access the Members Directory
		Influence ISN's future via ISN Supporting Groups

## Disclosure

None

## aHUS



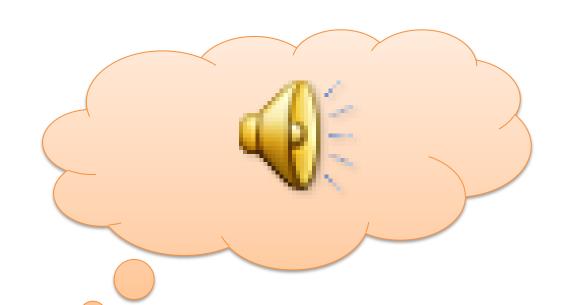
- AGE-20 yrs
- PMH

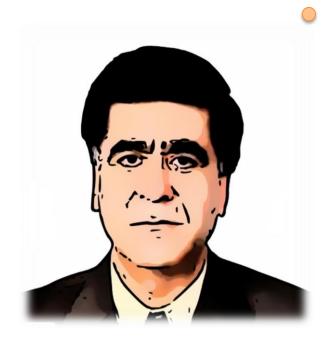
DX- age 7.5m ( AKI,MTA) PD- 1378-1381

CKD management Renal Biopsy- TMA

- FH
  - affected sibling
  - Close relative parents
- Referred to
  - adult nephrologist

Hemely he Wremic · Job John put eils et ITAI M Powder - I CACP Distromedical Living JUSTINE ADAMTISAD ADAMTIS B, I, H vir DMSA ever dica dela ila, Horse shee es il il en et il su sur ei . ei . En i einsi des por con den cies





# Atypical Hemolytic Uremic Syndrome (aHUS) Genetic Susceptibility Panel

ADAMTS13	C3	C4BPA	CD46 (MCP)	
CD59	CFB	CFH	CFHR1	
CFHR2	CFHR3	CFHR4	CFHR5	
CFI	DGKE	ММАСНС	PLG	
THBD	CFHR3-CFHR1 structural variants			
C5 (c.2653C>T(p.Arg885Cys) and c.2654G>A(p.Arg885His))				

with

indi

Thr

mec

mec

acid

(Pla

### Long term outcomes and response to treatment in *DGKE* nephropathy

#### **PATIENTS**

#### Prospective 442 aHUS referrals to National Centre



80 prospectively recruited to MPGN National Study

#### Retrospective

19 aHUS families with no known mutation

175 with aHUS at <1 year and no known mutation

International aHUS referrals

## Phenotype analysis



DGKE sequencing



#### Manifestation

Median age at presentation 9 months

14/16 presented in first two years of life

No mutation identified in patients > 8 years



Neuro-cognitive disorder in 6 individuals

developmental delay (n=3), learning difficulties (n=4) and autistic spectrum disorder (n=2)



7/14 required dialysis at presentation 6/13 symptomatic treatment 6/13 received plasma therapy Proteinuria 14/15

No relapse after renal Tx

All stopped haemolysing and recovered renal function after the initial presentation regardless of treatment.

## Eculizumab treatment

6/16 received eculizumab

One relapse observed while on therapy

Three patients stopped treatment with one relapsing and spontaneously recovered

One patient went to ESRD with no effect of rescue eculizumab

16 patients with variant

1MPGN

15 aHUS

#### Incidence

DGKE aHUS 0.009/mil/year DGKE MPGN 0.006/mil/year DGKE nephropathy 0.015/mil/year

#### **CONCLUSION:**

Disease initially manifests exclusively in children.

DGKE mediated aHUS is eculizumab **non-responsive** and individuals who currently receive eculizumab therapy **can be safely withdrawn**. No relapse was seen after renal transplant.



Brocklebank et al, 2019

سلام سارا هستم ما ۲ اردبیهشت نوبت دکتر داشتیم رفتیم دکتر خسروی گفت نامه ی برای دکتر قلب برای ریه برای گوارش برای عکس از مثانه و کلیه برای دنداپزشکی برای روانشاسی باید انجامش بدیم برای قبل از آمادگی پیوند کلیه باید اینارو انجام بدم

22:33

آیا اگر پیوند بشم جواب میده؟ خواستم نظر شما را هم بدانم چون شما از قبل حدود نوزده سال پزشک من بودید اول امیدم به خدا و امیدم به شما خواستم نظرتون را بدانم

22:36

لطفا بیشتر راهنمایی ام کنید باید بدونم ممنون میشم منتظر جوابتون هستم

22:38

شما با قبلا با دکتر خسروی هماهنگ کرده بودین بابت آزمایش ژنتیک





## MYON



I have been fighting aHus since I was 7 months old. I wish to live normally without the requirement of a renal transplant and with effective medication. I have a dream to live the same as other normal people with my family and have a better life.

Ψ