STUDY ON PROPORTION AND DIAGNOSIS OF RENAL AND UTERER MALFORMATIONS BEFORE AND AFTER BIRTH AT NATIONAL HOSPITAL OF OBSTETRICS AND GYNEACOLOGY

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BACKGROUND

- Renal and uterer malformation (RUM) in newborns is a group of abnormalities in term of functions, structures and morphology related to kidney and uterer.
- Study of Trần Đình Long et al has shown that the rate of RUD in newborn is 0,98%
- Trần Ngọc Bích et al (2013) indicated that the rate of RUD is 11,5% among all newborn disorders

- F.Boussion (2011) has shown that the rate of RUM took about 20-30% all abnormalities, rank the 2nd after central nervous system disorders, and prenatal detection rate is about 80%.
- Prenatal screening by ultrasound and postnatal diagnosis help physicians to manage those conditions to avoid newborn mortality.

OBJECTIVES

1.To determine the proportion of renal and uterer diseases in newborns at NHOG.
2.To compare diagnosis of those diseases before and after birth.

METHODOLOGY

- **Materials:**
  - All newborns diagnosed with renal and uterer malformations, and were born in NHOG from January 2014 to July, 2015.
- ***Inclusion criteria***
  - All newborns were delivered at NHOG diagnosed with renal and uterer malformations.
- ***Exclusion criteria***
  - Newborn death within first 24 hours
- **Study design:** propective study
- ***Sample size:*** *Convinient sample*

RESULTS AND DISCUSSIONS

Among 76 patients, 100 RUM were detected prenatally.

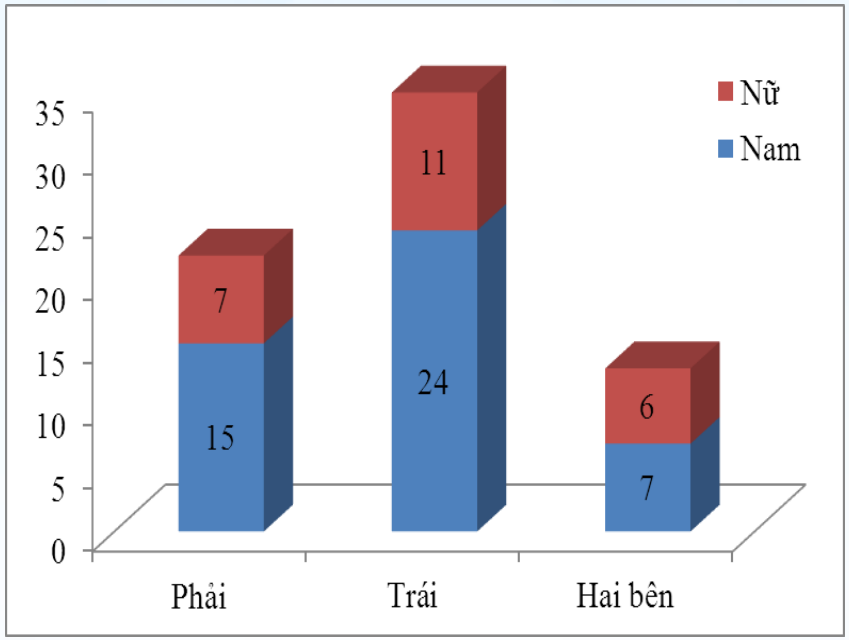
After birth, among 70 patients, 87 RUM were diagnosed.

➢ The rate of renal and uterer malformations

- The rate of renal and uterer malformations at NHOG was 0,2% (70/35351).
- Male: 0,24% (46/19166)
- Female: 0,15% (24/16185)

Agnieska Lukomaska và cs (2012) 0,17%

Distribution of gender-position of kidney-uterer

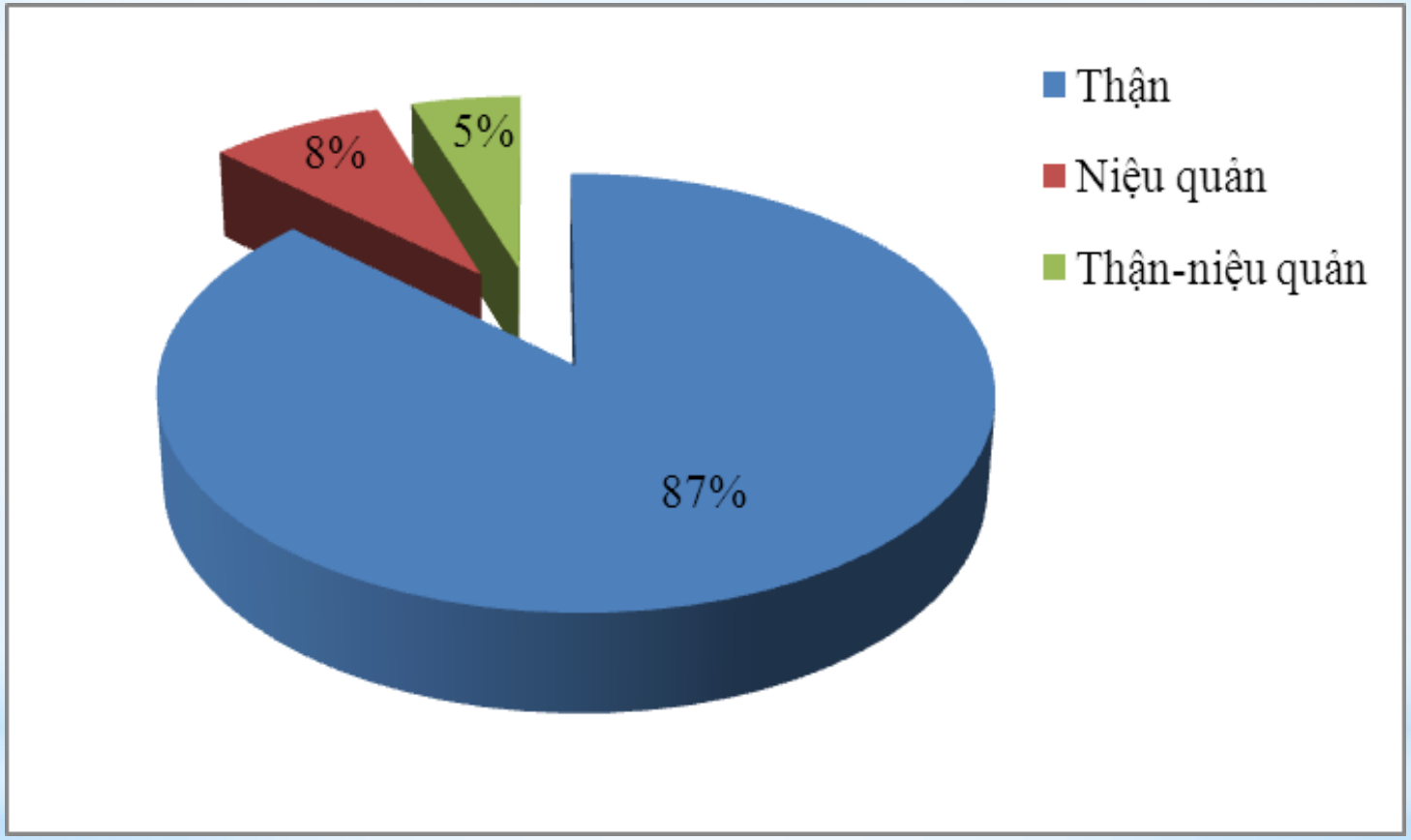


- Ratio of male/female with RUD: 1,92/1.
- RUD left/right: 1,59/1.
- Bilateral disorder of kidney: 18,57%.

Halek J et al (2010) male/female: 1,6/1, Dias T et al (2014) male/female: 2/1
Di Renzo (2013) left/right: 1,7/1

Distribution of gestational age at birth

Gestational age	**N**	**%**
Preterm birth (<37 week)	5	6,6%
Term birth (37 to 42 week)	71	93,4%



RUM detected by prenatal ultrasound

Renal and uterer malformations diagnosed after birth

Malformations	n	%
Kidney	23	26,43%
Uterer	55	63,2%
Both	9	10,37 %
Total	**87**	**100%**

Comparision of RUM before and after birth

	Prenatal diagnosis	Postnatal diagnosis	Correct diagnosis
Hydronephrosis	65	43	66,15%
Megauretere	4	7	57,14%
Utererocele	4	5	80%
Uterer-renal duplex	5	9	55,55%
renal displasia	0	2	0
Renal dystrophy	7	7	100%
Renal cyst	11	10	90,09%
Renal atrophy	4	4	100%
Total	100	87	

Newborns received surgical operation during follow-up

	N	Period		
		≤ 1 month	2-12 months	13-18 months
Hydronephrosis	7	2	4	1
renal-uterer duplex + utererocele	6	1	3	2
Megauterer	4	1	2	1
Renal displasia	1	0	0	1
Renal cyst	1	0	1	0
Total	19	4	10	5

Surgical treatment: 27,14% (19/70)

Koff SA (2000) 22%

CONCLUSIONS

In our study, the proportion of renal uterer malformations was 0,2% in all newborn in researched period. Among those detected diseases, hydronephrosis was common in population.

Prenatal ultrasound is valuable in detecting RUM. To compare before and after birth diagnosis, ultrasound detection rate was 87%.

THANK YOU FOR YOUR ATTENTION!