

INTRODUCTION

Nuchal
translucency (NT)

NT measured by
ultrasound

- fluid identified at the back of the fetal's nuchal
- First-trimester
- A criteria for prenatal screening



INTRODUCTION

Diagnose
increased NT

- Use a chronograph chart
- Use threshold: 3.0mm; 3.5mm

Diagnose
increased NT in
Viet Nam

- 24.4% of chromosomal abnormalities
- 18.0% of morphological abnormalities

**If using the 2.5mm threshold of NT for diagnostic
How would the abnormal rates change?**

OBJECTIVE

**DESCRIBE THE PRENATAL DIAGNOSIS'S RESULTS OF FETALS
WITH INCREASED NUCHAL TRANSLUCENCY**

MATERIAL & METHOD

METHOD

- Descriptive prospective

SAMPLE SIZE

- $n = 270$, with
- ✓ $p = 0.244$
- ✓ $\alpha = 0.05$
- ✓ $\varepsilon = 0.21$

MATERIAL & METHOD

- ❑ 278 pregnant
- ❑ Center Prenatal Diagnostics - National Hospital of Obstetrics and Gynecology
- ❑ 4/2017 - 9/2017

- Gestational age: 11w - 13w6d
- NT \geq 2.5mm
- Consulted for pregnancy by amniocentesis for Karyotype
- Ultrasound at 22w gestation

RESULTS AND DISCUSSION

Table 1. Age of pregnant (years old)

Age	No	%
< 20	3	1.1
20 - 34	213	76.6
≥ 35	62	22.3
Total	278	100

The mean age: 30.1 ± 5.5

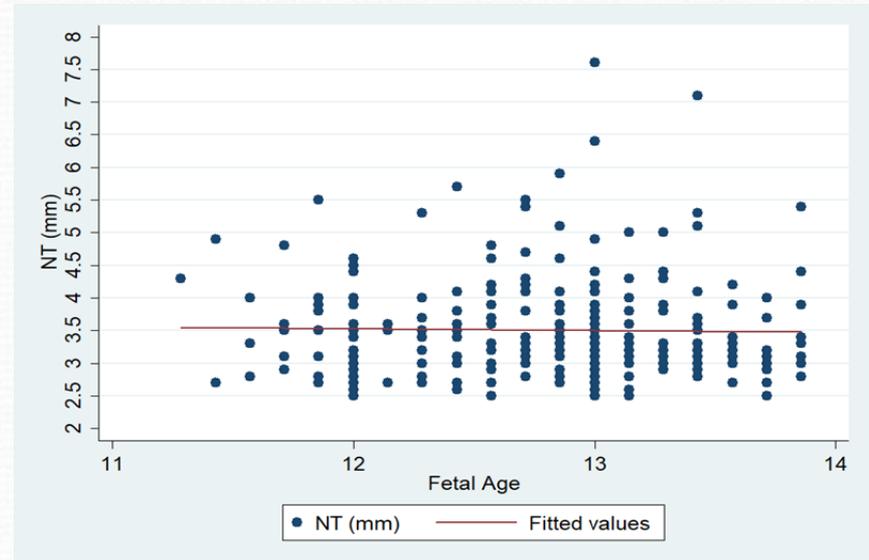
The lowest was 19 years old

The highest was 45 years old

RESULTS AND DISCUSSION

Table 2. Mean of NT and gestational age

Content	Mean \pm SD	Min - Max
Gestational age	12w5d \pm 1w2d	11w2d – 13w6d
NT	3.5 \pm 0.8mm	2.5 – 7.6 (mm)



- The mean gestational age when measured NT was 12 weeks and 5 days.
- The average size of the NT is 3.5 \pm 0.8mm.

RESULTS AND DISCUSSION

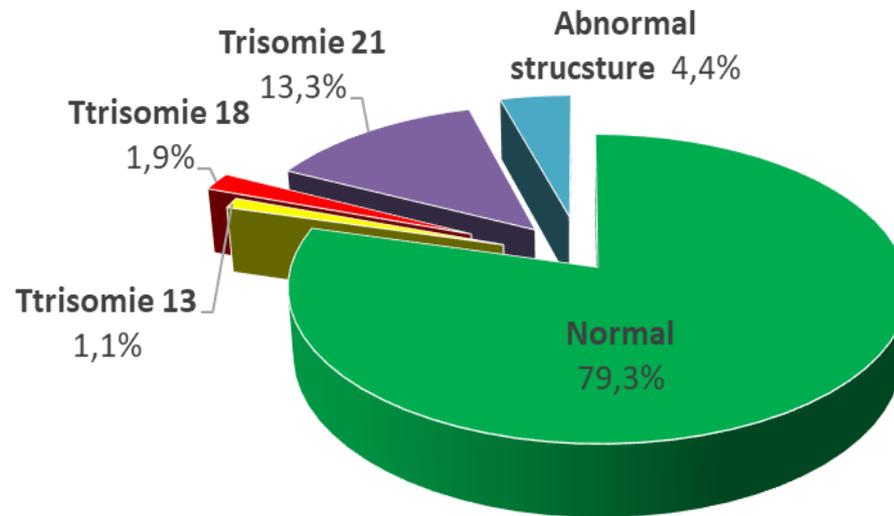


Figure 1. Results of fetal chromosome map (n = 270)

- **Chromosome aberration: 20.7%**
 - ✓ Numerical disorders: 16.3%
 - ✓ Structural abnormalities: 4.4%

RESULTS AND DISCUSSION

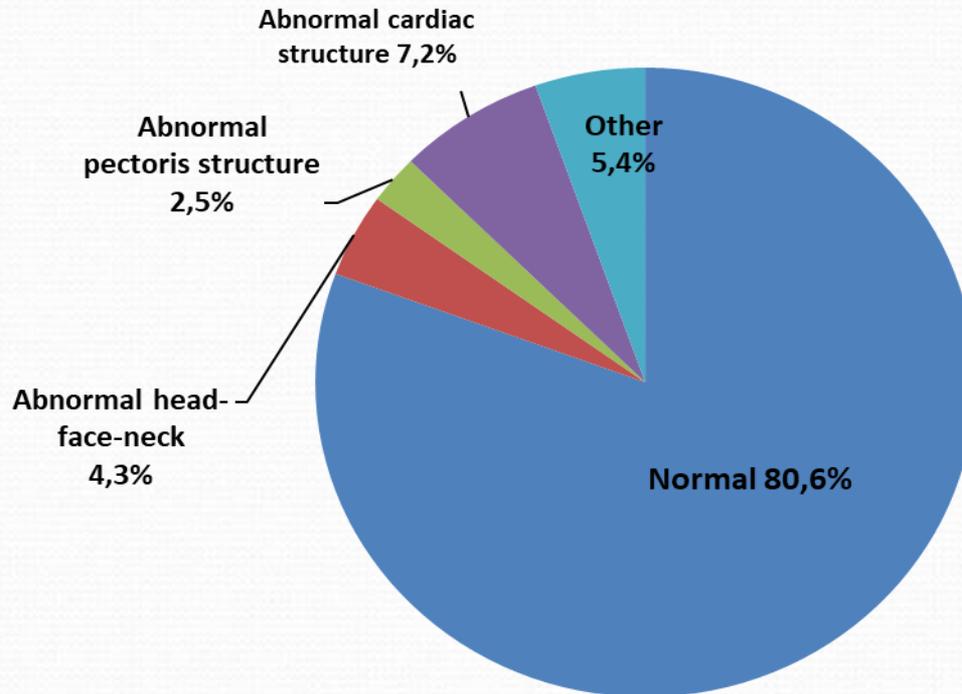


Figure 2. Result ultrasound (n = 278)

- Morphology abnormal :19.4%
- Fetal cardiac structures abnormalities: 7.2%

RESULTS AND DISCUSSION

Table 3: Chromosome abnormalities by fetal nuchal translucency (n=270)

Chromosome Nuchal Translucency	Abnormal		Normal		p
	n	%	n	%	
2.5 – 2.9 mm	12	22.6	41	77.4	>0.05
3.0 – 3.4 mm	19	17.9	87	82.1	
3.5 – 3.9 mm	11	20.0	44	80.0	
≥ 4.0 mm	14	25.0	42	75.0	
Total	56	20.7	214	79.3	

The difference was not statistically significant between chromosome abnormalities and the Nuchal Translucency ($p > 0.05$).

RESULTS AND DISCUSSION

**Table 4: Morphology abnormal by fetal nuchal translucency
(n = 278)**

Ultrasound results NT	Abnormal		Normal		p
	n	%	n	%	
2.5 - 2.9 mm	10	18.2	45	81.8	>0.05
3.0 - 3.4 mm	14	12.8	95	87.2	
3.5 - 3.9 mm	16	29.9	39	70.1	
≥ 4.0 mm	14	23.8	45	72.7	
Total	54	19.4	224	80.6	

The difference was not statistically significant between morphology abnormal and nuchal translucency ($p > 0.05$)

RESULTS AND DISCUSSION

Table 5: Chromosome abnormalities by fetal nuchal translucency cut - off (n=270)

Chromosome Nuchal Translucency	Abnormal		Normal		p
	n	%	n	%	
≥ 2.5mm	56	20.7	214	79.3	>0.05
≥ 3.0mm	44	20.3	173	79.7	
≥ 3.5mm	25	22.5	28	80.5	

The difference was not statistically significant between chromosome abnormal and thresholds of nuchal translucency cut - off

RESULTS AND DISCUSSION

Table 6: Morphology abnormal by Nuchal Translucency cut - off (n=278)

Ultrasound result NT	Abnormal		Normal		p
	n	%	n	%	
≥ 2.5mm (1)	54	19.4	224	80.6	$p_{1-2} > 0.05$
≥ 3.0mm (2)	44	19.7	179	80.3	$p_{2-3} < 0.05$
≥ 3.5mm (3)	30	26.3	84	73.7	$p_{1-3} < 0.05$

- **Morphology abnormal in fetal NT ≥ 2.5mm: 19.4%**
 - ✓ The difference was not statistically significant with NT ≥ 3.0mm ($p_{1-2} > 0,05$)
 - ✓ The difference was statistically significant with NT ≥ 3.5mm ($p_{1-3} < 0.05$).

CONCLUSION

1. Nuchal Translucency 2.5 - 2.9mm:

- Chromosome aberration: 22.6%
- Morphology abnormal: 18.2%

2. Nuchal Translucency ≥ 2.5 mm:

- Chromosome aberration: 20.7%
- Morphology abnormal : 19.4% (15.4% normal karyotype)
- The most common morphology abnormality is cardiac structure abnormal (7.2%)
- The difference was not statistically significant with NT ≥ 3.0 mm
- The difference was statistically significant with NT ≥ 3.5 mm



THANK YOU VERY MUCH FOR YOUR ATTENTION!