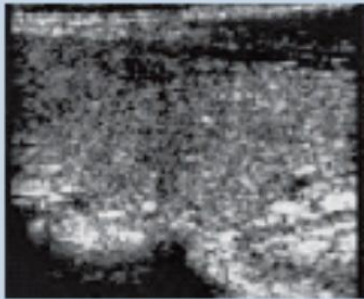


# CÁCH ĐO CÁC TẠNG TRỊ SỐ BÌNH THƯỜNG

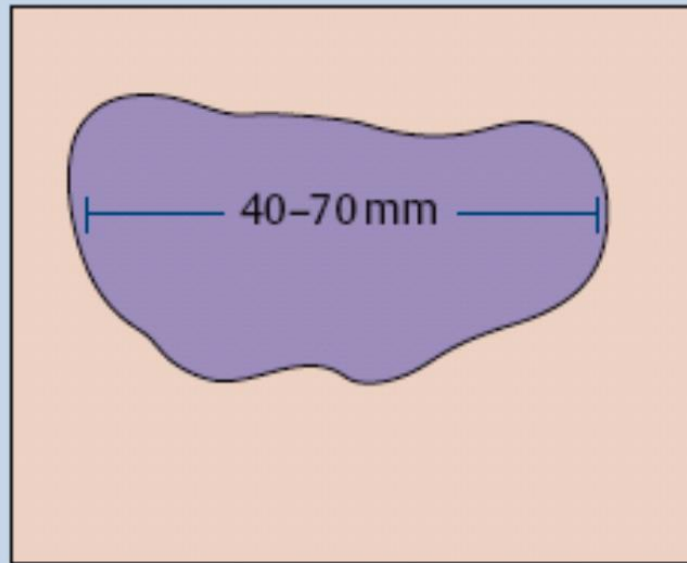
Bs Nguyễn Hữu Chí  
Khoa Siêu âm-BV Nhi Đồng I

# TUYẾN GIÁP

## ► Thyroid gland



In longitudinal section



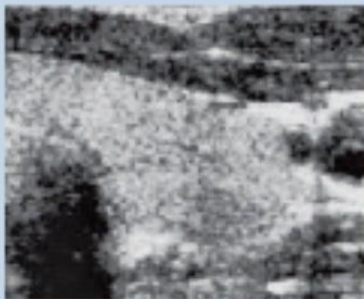
Length 40–70 mm

Width 10–30 mm

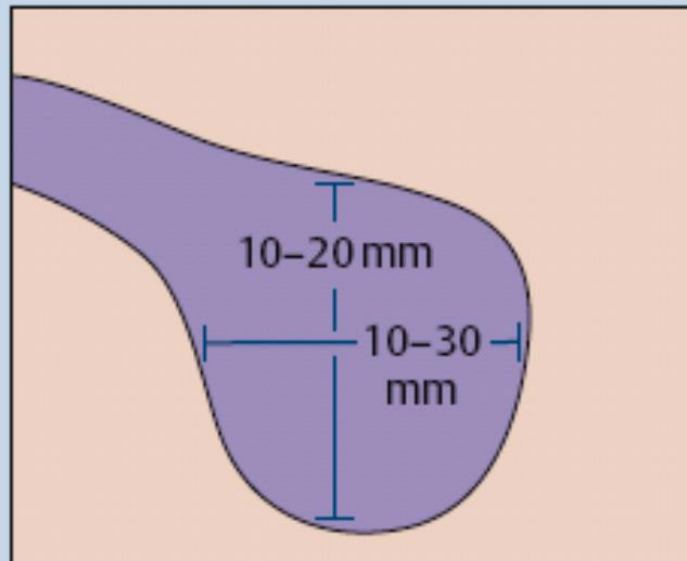
Depth 10–20 mm

Volume in men:  
< 25 mL

Volume in women:  
< 20 mL



In transverse section



## Sonographic Normal Thyroid Lobe Measurements (cm)

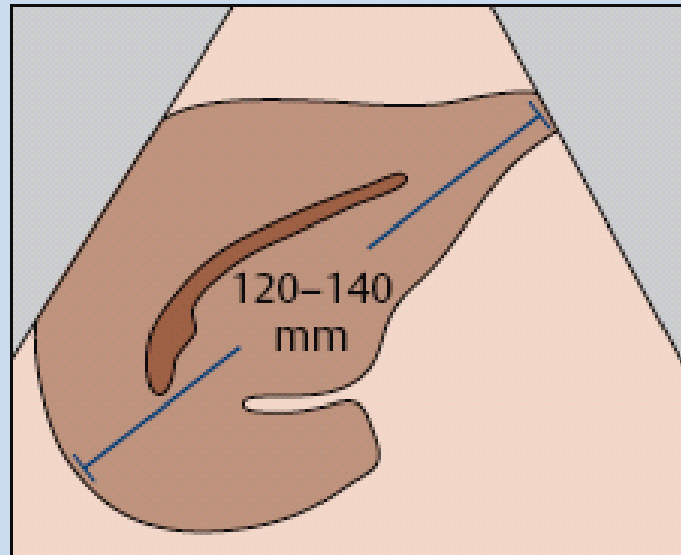
Age	Transverse (cm)	Longitudinal (cm)	AP (cm)
Infants and Young Children	1 - 1.5	2 - 3	0.2 - 1.2
Adolescents & Adults	2 - 4	5 - 8	1 - 2.5

# GAN

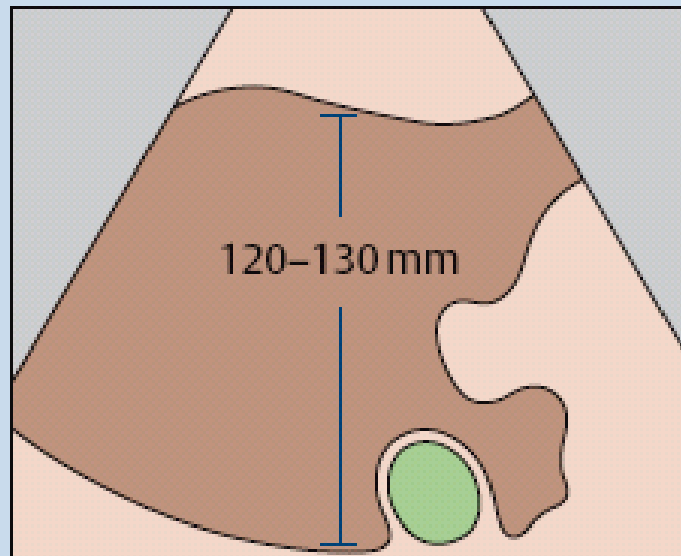
## ► Liver



In longitudinal section



In transverse section



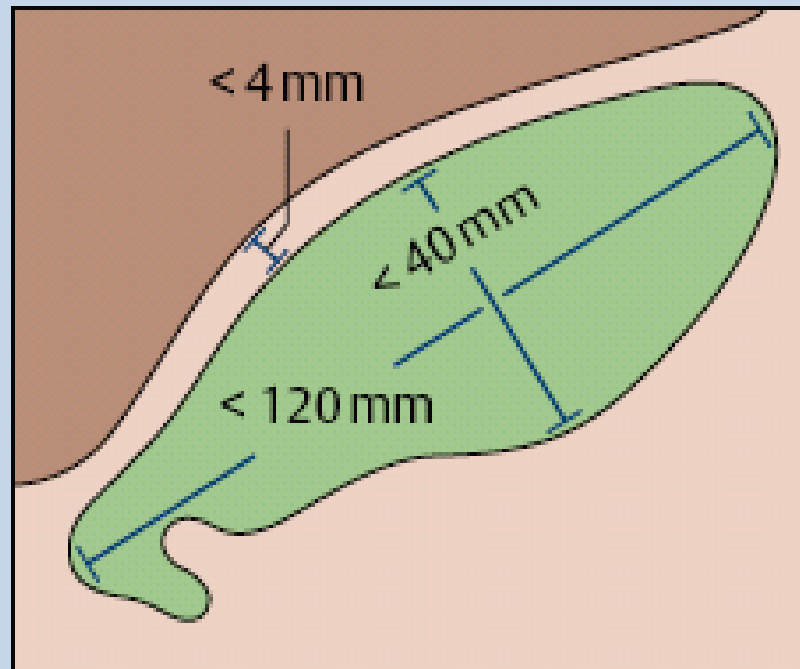
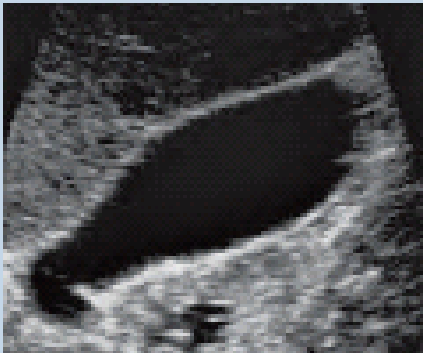
Craniocaudal  
< 140 mm

Antero-  
posterior  
< 120 mm

Angle of  
inferior border:  
Left < 30°  
Right < 45°

# TÚI MẬT

## ► Gallbladder



Length  
< 120 mm

Width  
< 40 mm

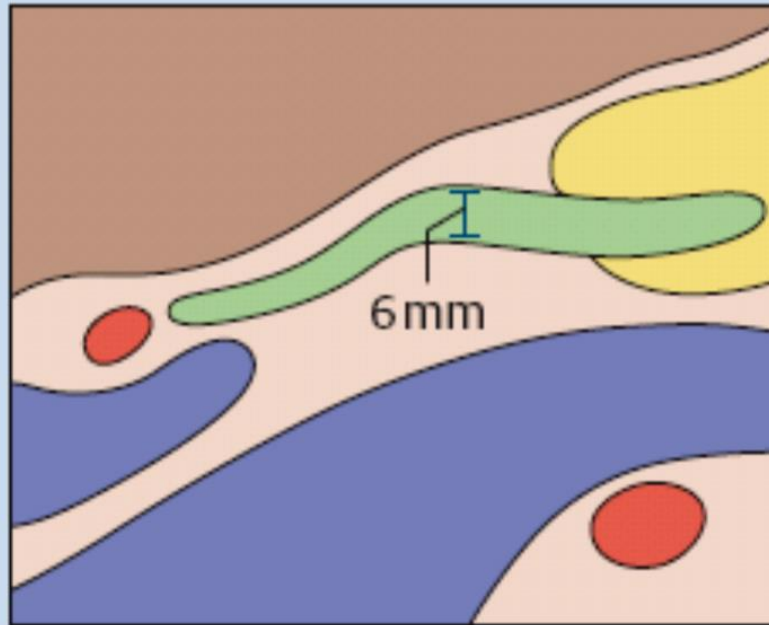
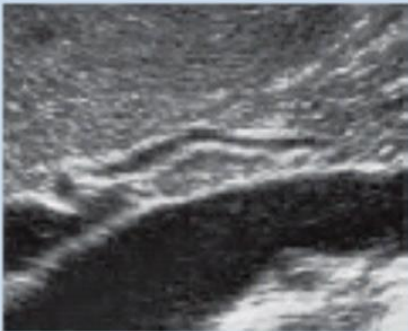
Wall thickness  
< 4 mm

## Normal Gallbladder Measurements vs. Age<sup>1</sup>

Age (y)	AP (cm) Mean	AP (cm) Range	Coronal (cm) Mean	Coronal (cm) Range	Length (cm) Mean	Length (cm) Range	Wall Thickness (mm) Mean	Wall Thickness (mm) Range
0-1	0.9	0.5-1.2	0.9	0.7-1.4	2.5	1.3-3.4	1.7	1.0-3.0
2-5	1.7	1.4-2.3	1.8	1.0-3.9	4.2	2.9-5.2	2.0	None
6-8	1.8	1.0-2.4	2.0	1.2-3.0	5.6	4.4-7.4	2.2	2.0-3.0
9-11	1.9	1.2-3.2	2.0	1.0-3.6	5.5	3.4-6.5	2.0	1.0-3.0
12-16	2.0	1.3-2.8	2.1	1.6-3.0	6.1	3.8-8.0	2.0	1.0-3.0

# ĐƯỜNG MẬT

## ► Bile duct

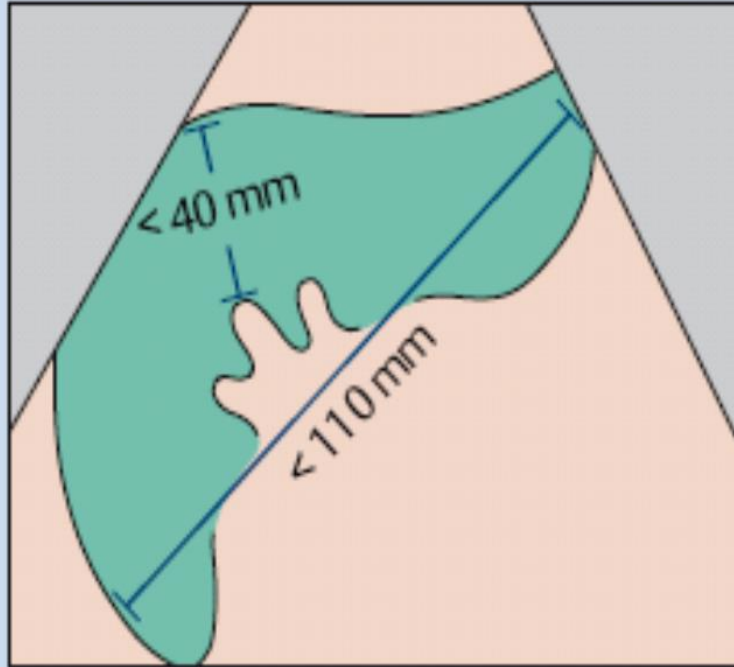


Normal width  
< 6 mm

After chole-  
cystectomy  
< 9 mm

# LÁCH

## ► Spleen



In longitudinal  
flank scan:  
Length < 110 mm  
Thickness < 40 mm

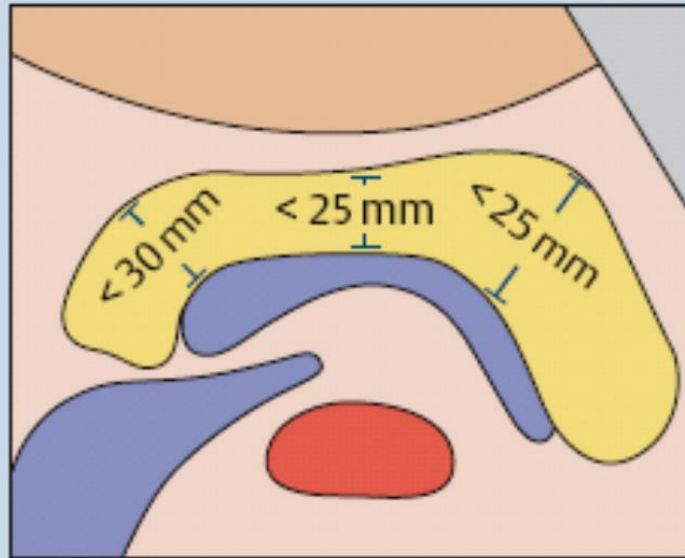


## Ultrasound: Normal Spleen Size versus Age<sup>1</sup>

Age	Spleen Length (cm)*
0 - 3 months	$\leq 6$
3 - 6 months	$\leq 6.5$
6 - 12 months	$\leq 7$
1 - 2 years	$\leq 8$
2 - 4 years	$\leq 9$
4 - 6 years	$\leq 9.5$
6 - 8 years	$\leq 10$
8 - 10 years	$\leq 11$
10 - 12 years	$\leq 11.5$
12 - 15 years	$\leq 12$
15 - 20 years (female)	$\leq 12$ (female)
15 - 20 years (male)	$\leq 13$ ( male)

# TỤY

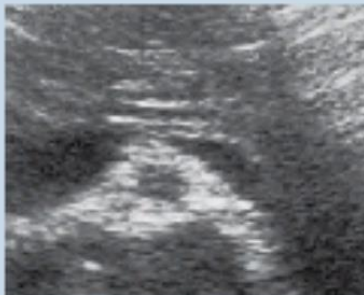
## ► Pancreas



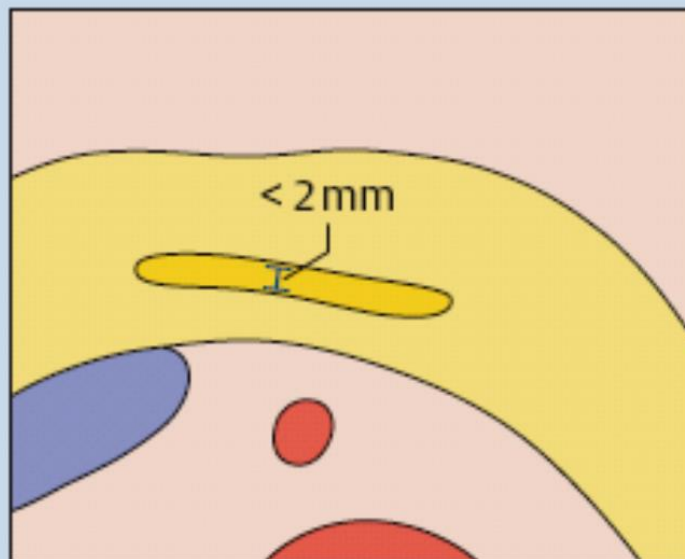
Head < 30 mm

Body < 25 mm

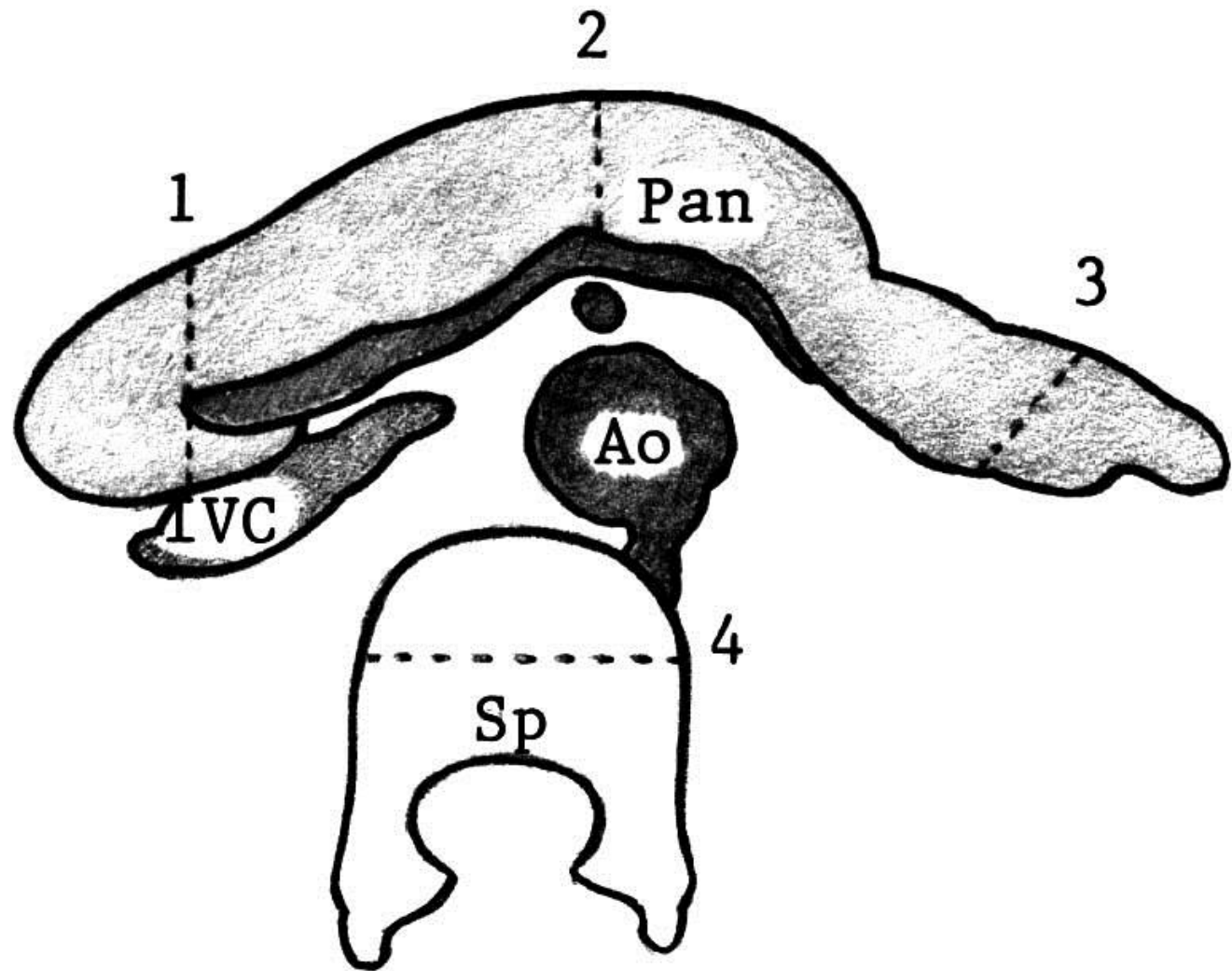
Tail < 25 mm



Pancreatic duct



Pancreatic duct  
< 2 mm



## Normal Pancreas Size as a Function of Age (Ultrasound)\*<sup>1</sup>

Age	Head in cm ( $\pm 1$ SD)	Body in cm ( $\pm 1$ SD)	Tail in cm ( $\pm 1$ SD)
< 1 month	1.0 $\pm$ 0.4	0.6 $\pm$ 0.2	1.0 $\pm$ 0.4
1 month to 1 year	1.5 $\pm$ 0.5	0.8 $\pm$ 0.3	1.2 $\pm$ 0.4
1 to 5 years	1.7 $\pm$ 0.3	1.0 $\pm$ 0.2	1.8 $\pm$ 0.4
5 to 10 years	1.6 $\pm$ 0.4	1.0 $\pm$ 0.3	1.8 $\pm$ 0.4
10 to 19 years	2.0 $\pm$ 0.5	1.1 $\pm$ 0.3	2.0 $\pm$ 0.4

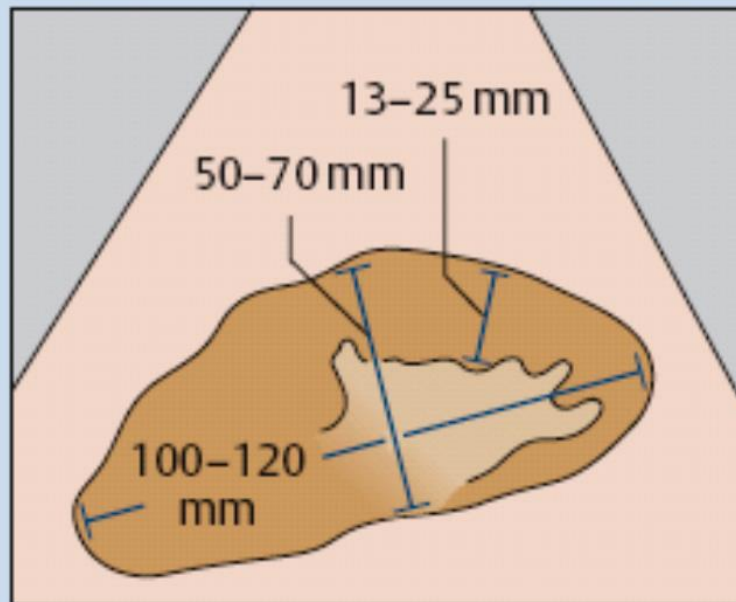
**Table 5.6** Normal dimensions of the pancreas as a function of age in children<sup>35</sup>

Age (years)	Maximal anteroposterior diameter <sup>a</sup> (cm)		
	Head	Body	Tail
0–6	1.6 (1.0–1.9)	0.7 (0.4–1.0)	1.2 (0.8–1.6)
7–12	1.9 (1.7–2.0)	0.9 (0.6–1.0)	1.4 (1.3–1.6)
13–18	2.0 (1.8–2.2)	1.0 (0.7–1.2)	1.6 (1.3–1.8)

<sup>a</sup>Mean values (range in parentheses)

# THẬN

## ► Kidneys



length 100–120 mm

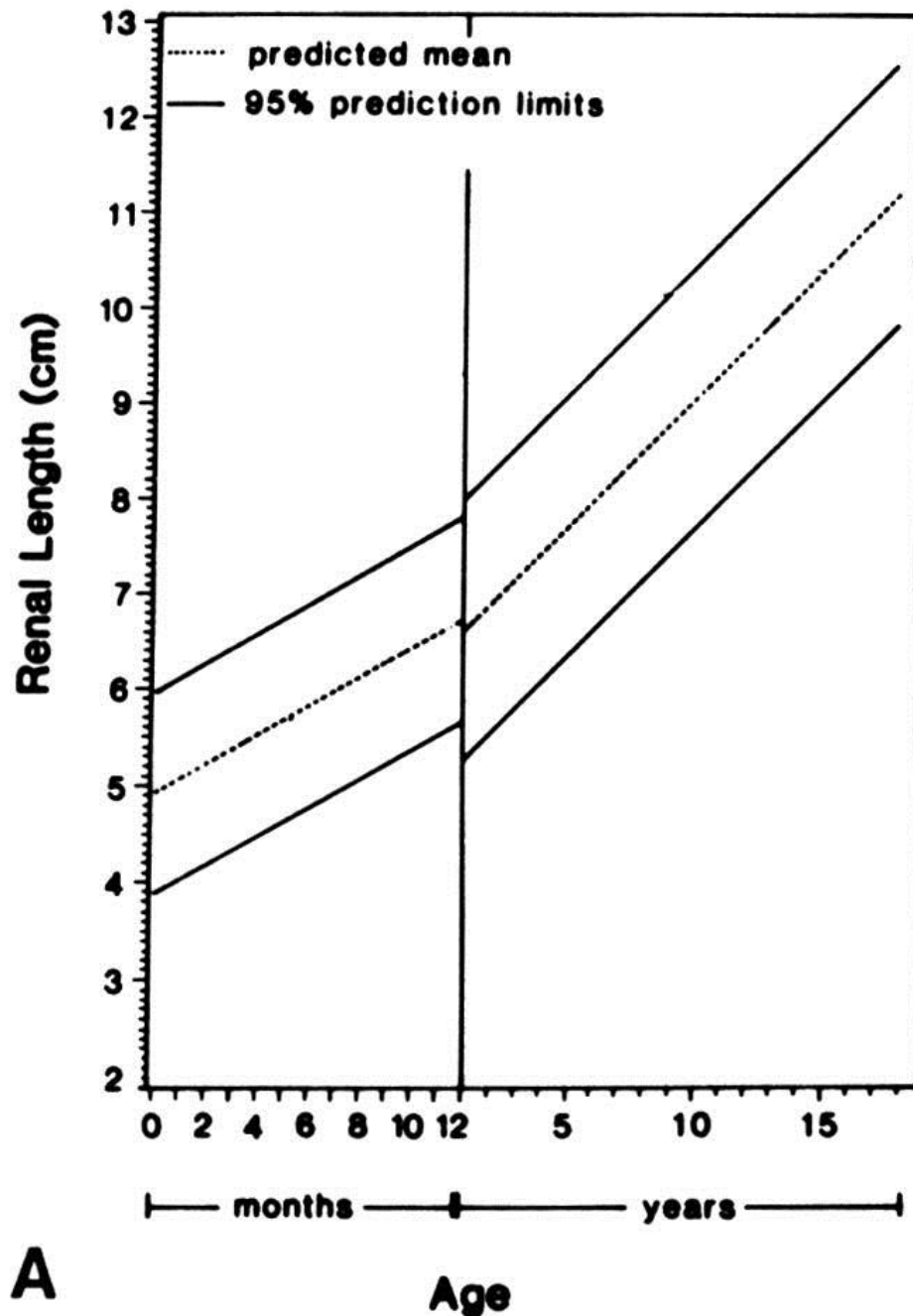
width 50–70 mm

Width of parenchyma:  
13–25 mm

Parenchymal-pelvic  
ratio:

60 years or younger 1.6:1

Over 60 years 1.1:1



**\*Kích thước:**

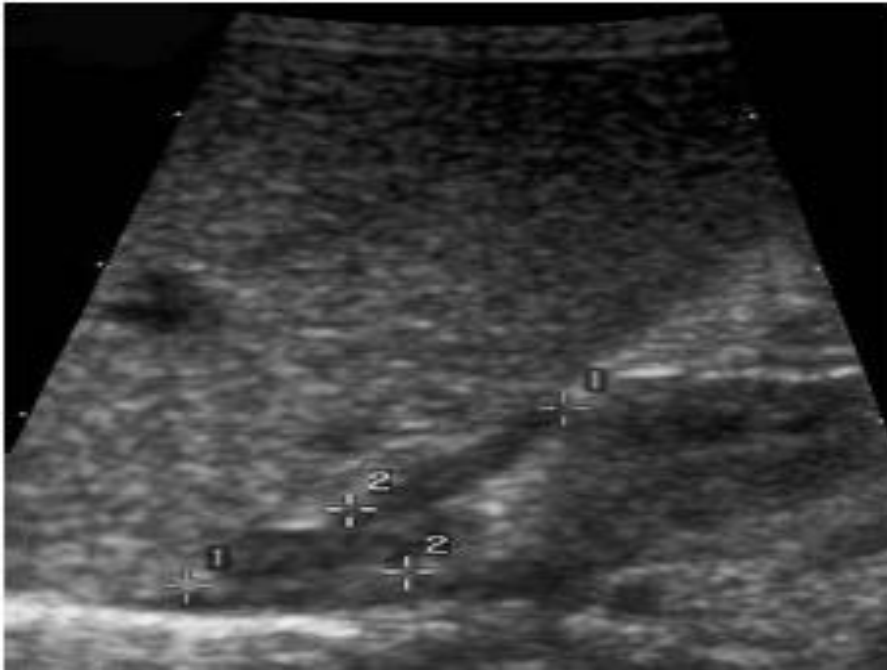
**Chiều dài trung bình**

. Sơ sinh : 4-4,5cm

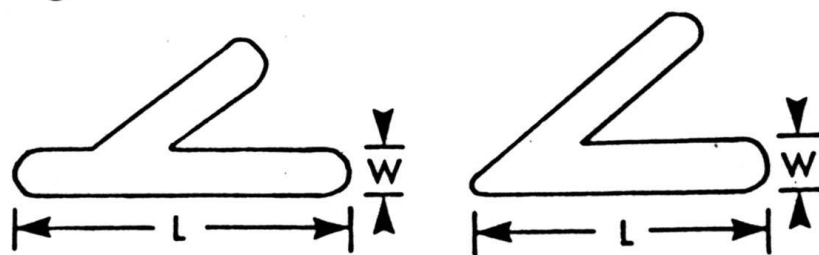
. <1 tuổi : 6cm

. <5 tuổi : 8cm

. <10 tuổi : 10cm



**Figure 1**



Methods used to measure normal adrenal glands on coronal and sagittal sonograms.  $L$  = length;  $W$  = width.

**Table 4.1** Normal range of ultrasonographically determined adrenal diameters in the normal neonate

Age (days)	Adrenal diameters (mm)		
	Transverse	Anteroposterior	Length
1	10.4-22.0	4.1-12.3	9.1-19.9
2	10.0-21.2	4.1-11.9	8.7-19.0
3	9.7-20.6	4.1-11.5	8.5-18.3
4	9.5-20.1	4.0-11.2	8.2-17.7
5	9.3-19.6	4.0-10.9	8.0-17.2
6	9.1-19.2	4.0-10.7	7.8-16.7
7	8.9-18.9	4.0-10.5	7.6-16.3
14	8.0-16.8	3.9-9.2	6.7-13.8
21	7.2-15.2	3.8-8.2	5.9-12.0
28	6.6-13.8	3.8-7.4	5.3-10.4
35	6.0-12.6	3.7-6.7	4.7-9.1
42	5.6-11.5	3.7-6.1	4.2-7.8

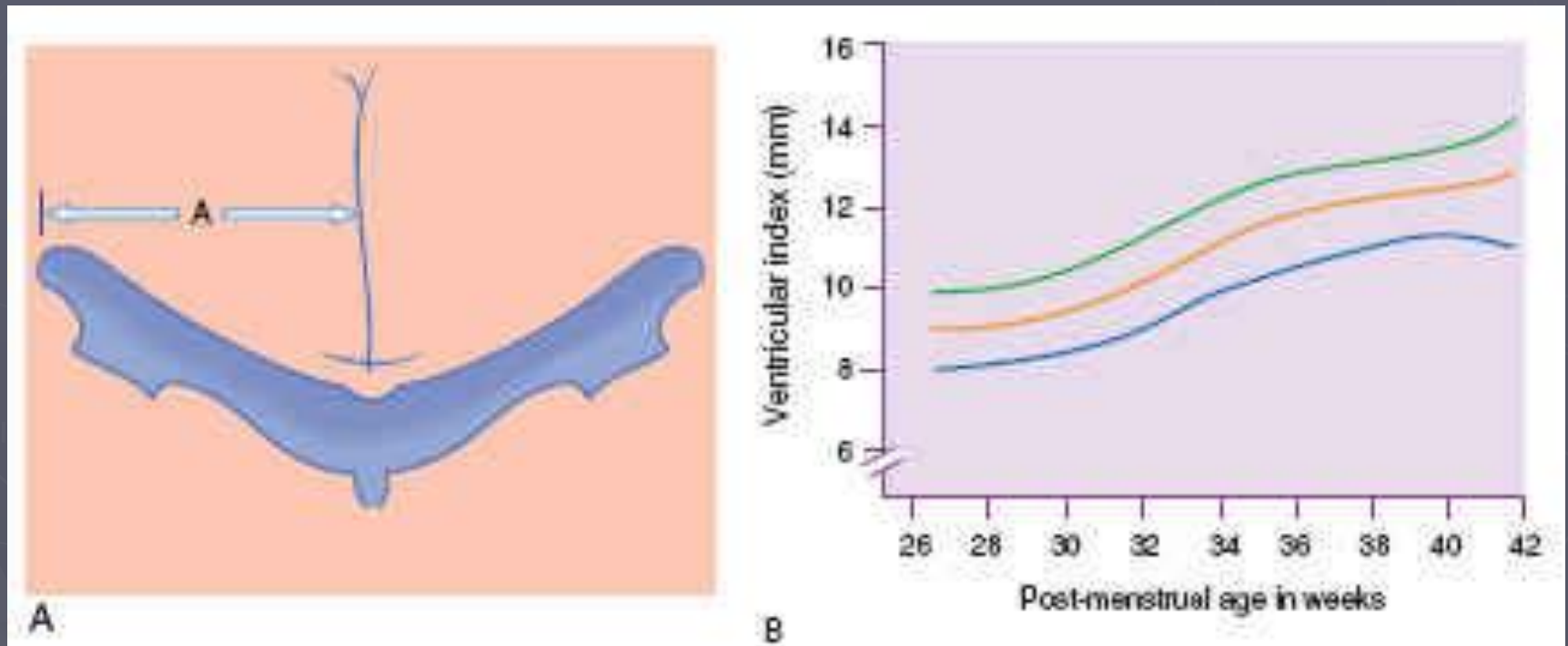
After Scott BM, Thomas A, McGarrigle HHB, Lachelin GCL. Serial adrenal ultrasonography in normal neonates. *J Ultrasound* 1990; 9:279.



## Normal Adrenal Gland Size as a Function of Age<sup>1</sup>

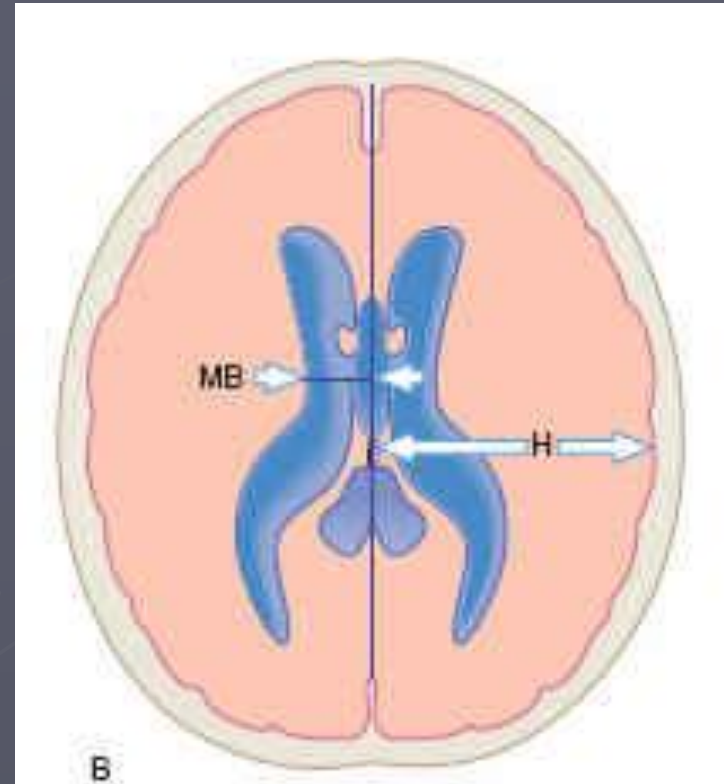
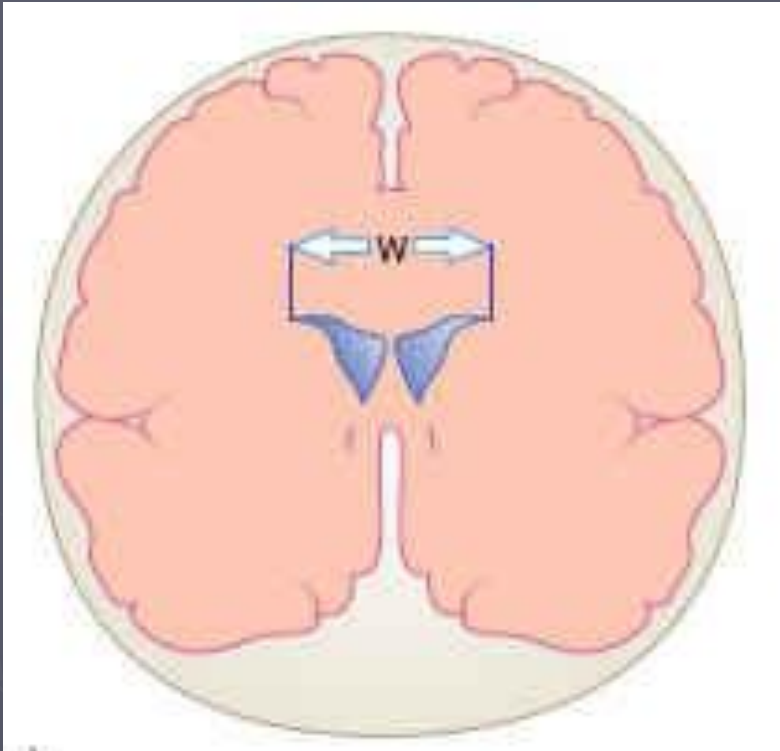
Age	Length (cm)	Thickness (cm)	Width (cm)
Neonate	0.9 - 3.6 (mean, 1.5)	0.2 - 0.5 (mean, 0.3)	--
Adult	4 - 6	0.2 - 0.6	2 -3

# CÁCH ĐO NÃO THẤT



**Levene-Chỉ số não thất**

**26-42W**



**Virkola**  
**Đủ thág**

Table 9.1 Normal ranges ( $-2$  SD to  $+2$  SD) for different ultrasonographic measures<sup>a</sup> of the neonatal and infant brain in healthy full-term infants

Age (months)	Midbody width (mm)	Hemispheric width (mm)	Combined coronal ventricular width (mm)
0	11.5–14.1	39.0–46.4	21.6–27.9
1	11.9–14.8	40.6–48.2	22.4–29.0
2	12.3–15.4	42.1–50.0	23.2–30.1
3	12.7–16.1	43.7–51.9	24.0–31.1
4	13.1–16.7	45.2–53.7	24.8–32.2
5	13.5–17.3	46.8–55.6	25.6–33.3
6	13.9–18.0	48.3–57.4	26.4–34.3
7	14.3–18.6	49.8–59.2	27.1–35.4
8	14.7–19.3	51.4–61.1	27.9–36.5
9	15.1–19.9	52.9–62.9	28.7–37.5

<sup>a</sup>See Figure 9.2 for definitions of measures.

After Virkola.<sup>4</sup>

ALOKA

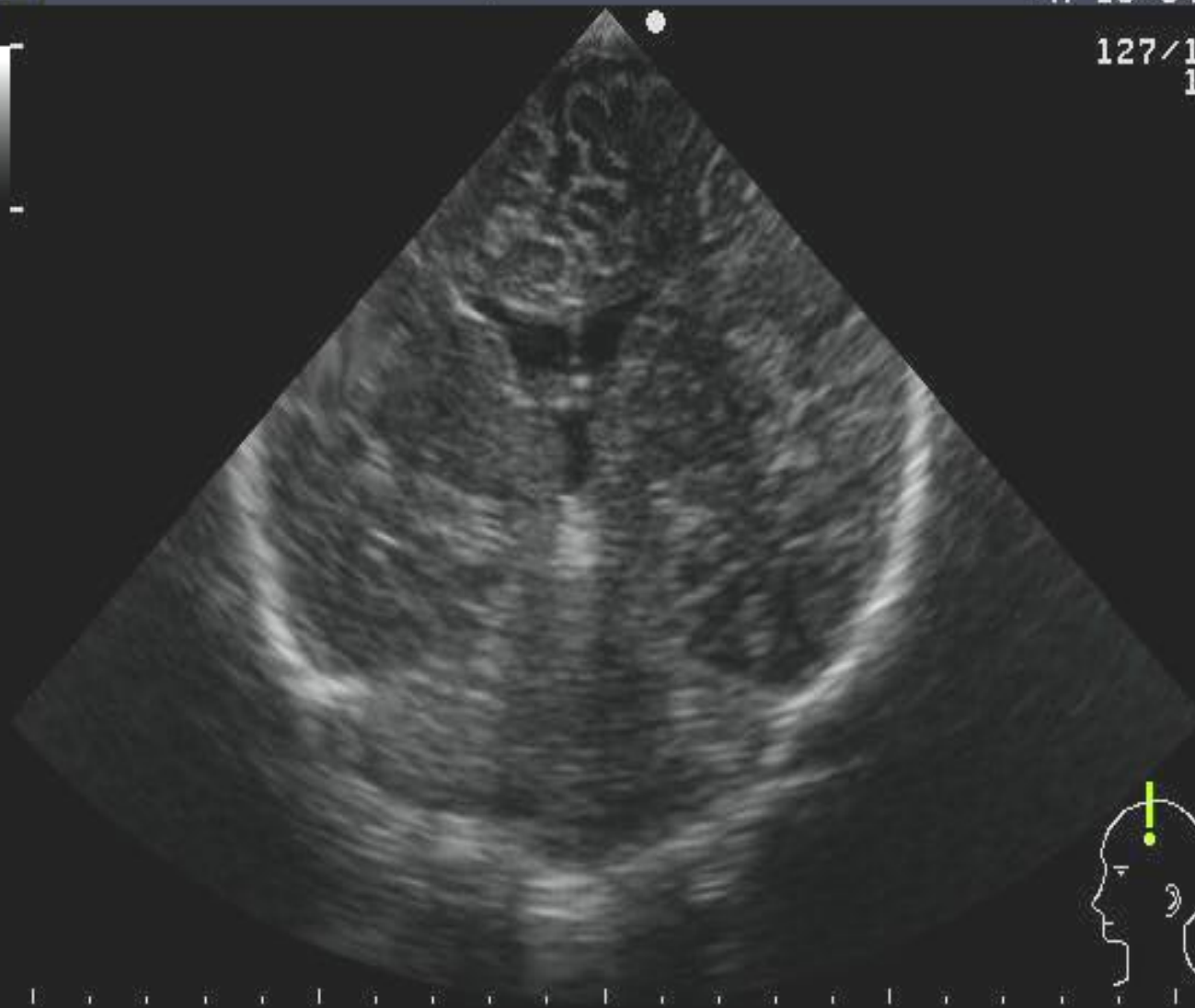
BV NHI DONG I

: No ID

: Y

18-JUN-03  
: M 15:34:17

127/128  
18Hz



6.0 R15 G55 C7

8: Neon. Head

DVA: 100%