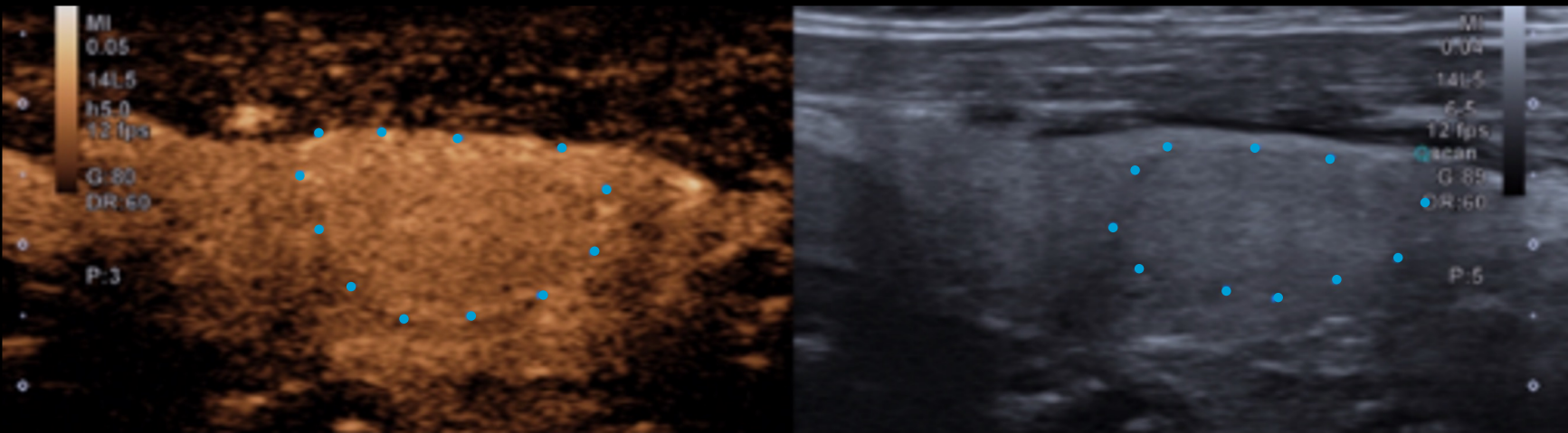
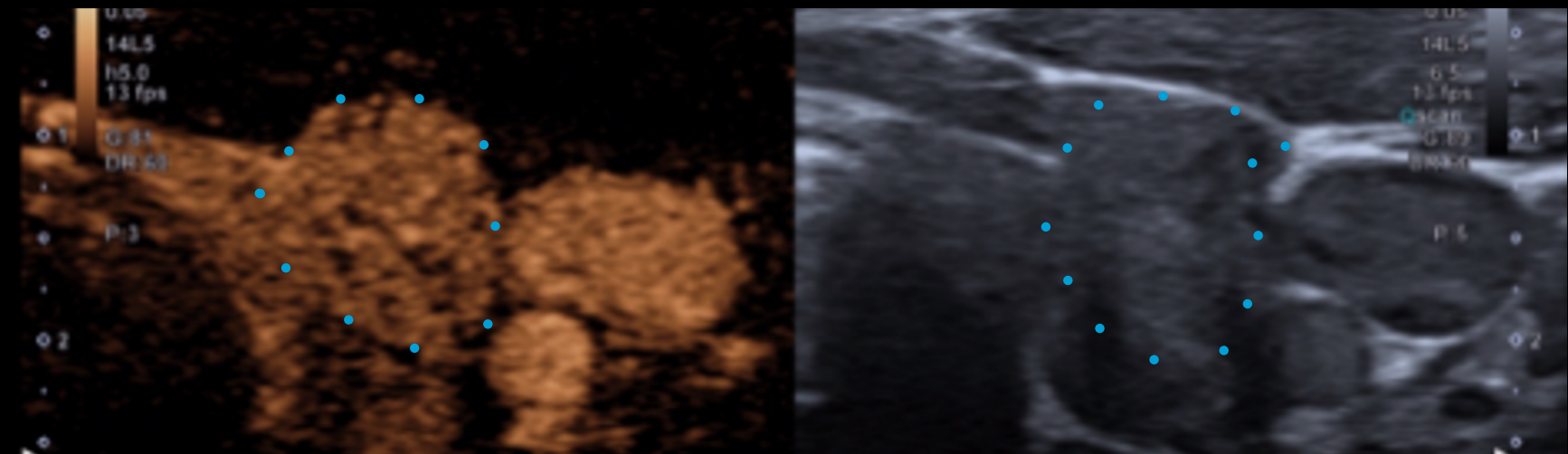


## Grau de Realce

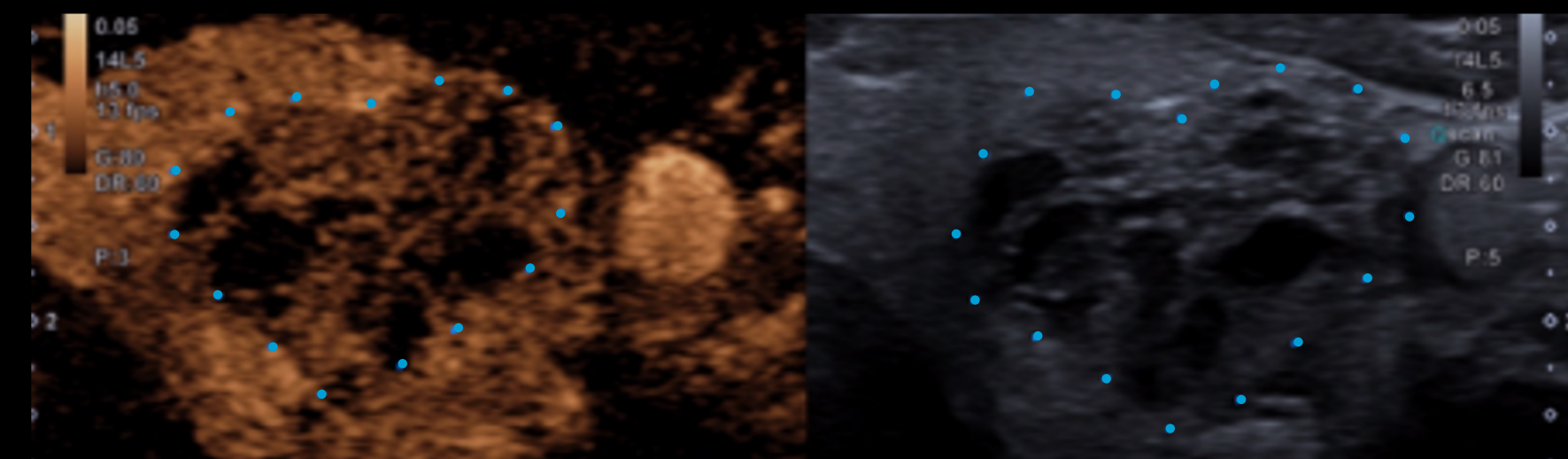
Maior que parênquima tireoidiano



Igual ao parênquima tireoidiano

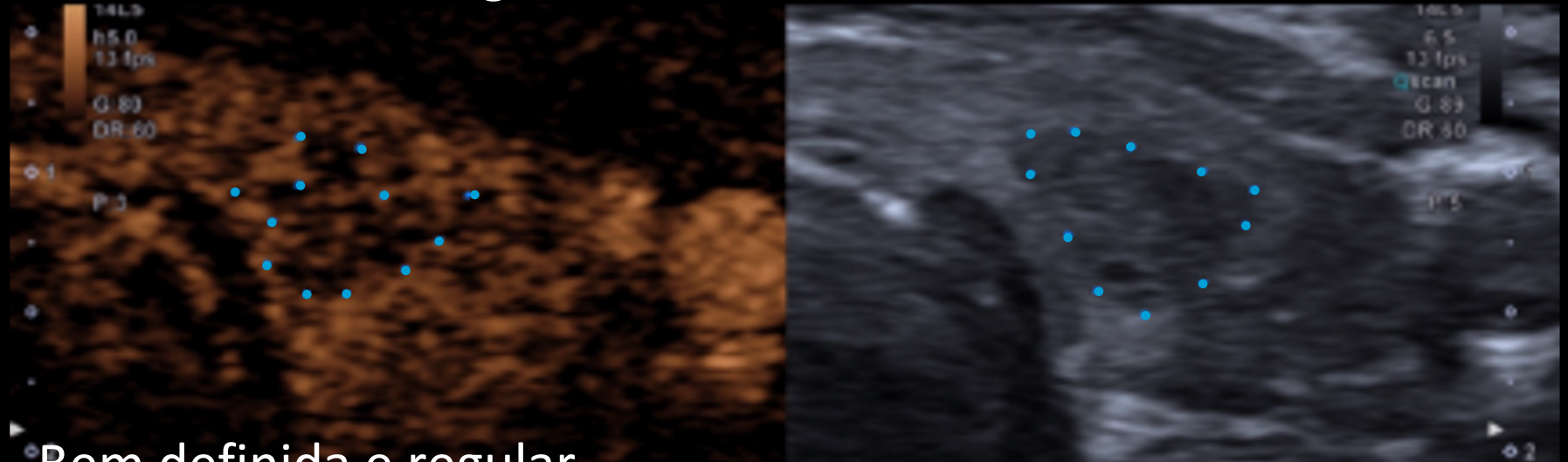


Menor que o parênquima tireoidiano

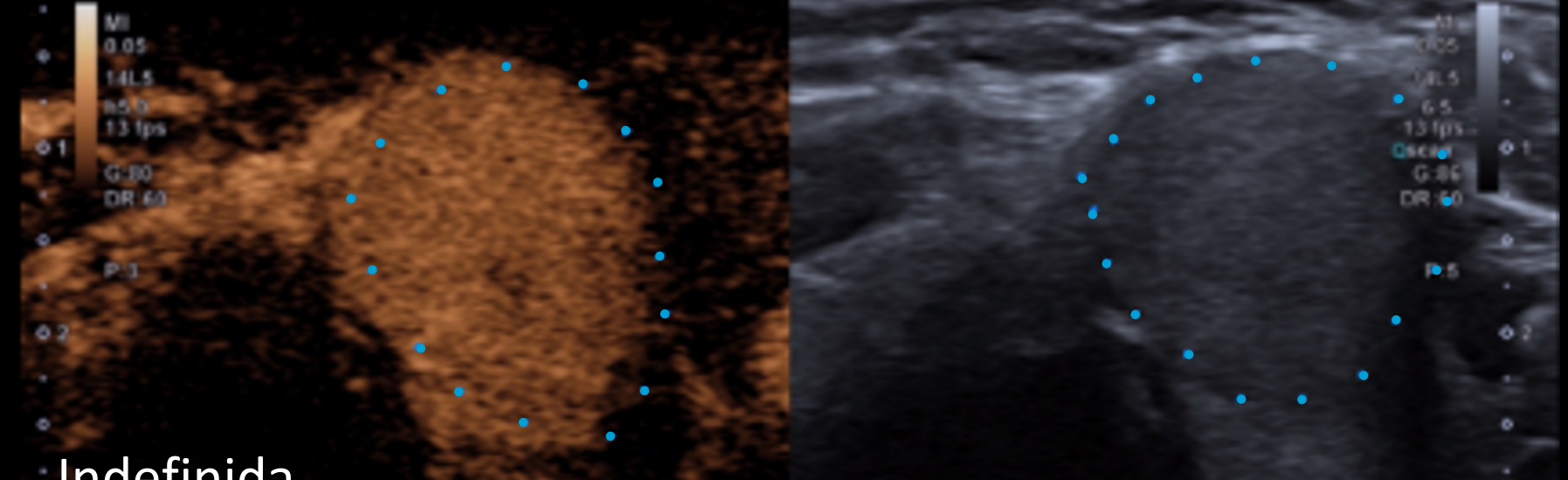


## Margens

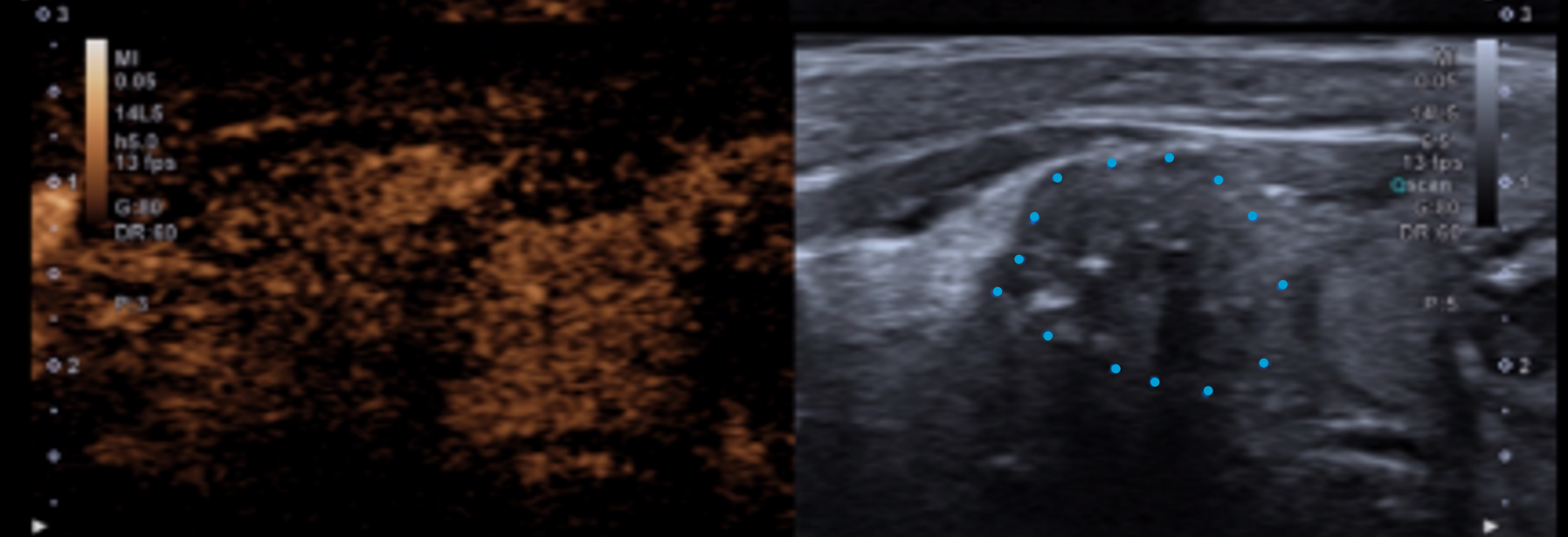
Bem definida e Irregular



Bem definida e regular

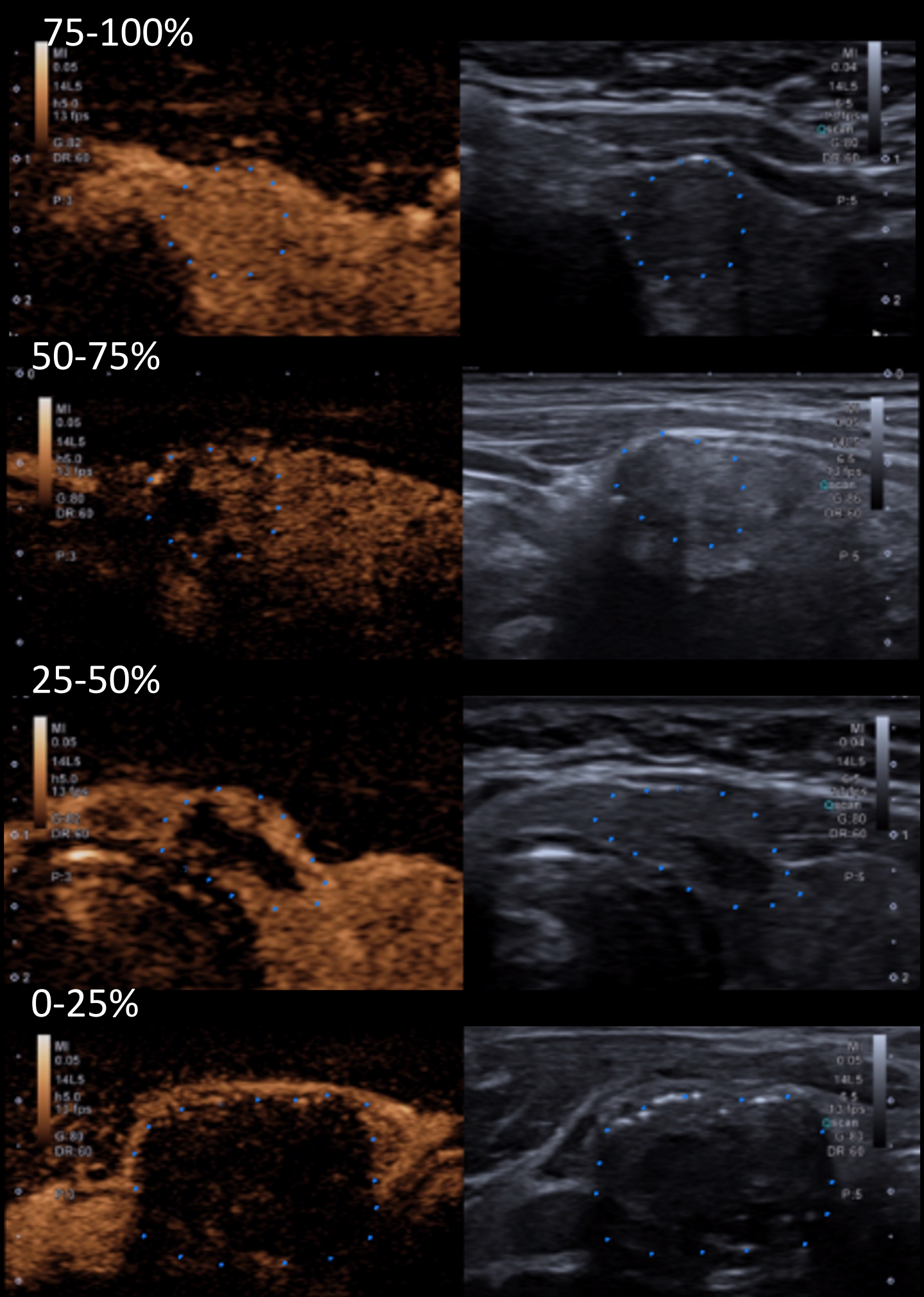


Indefinida

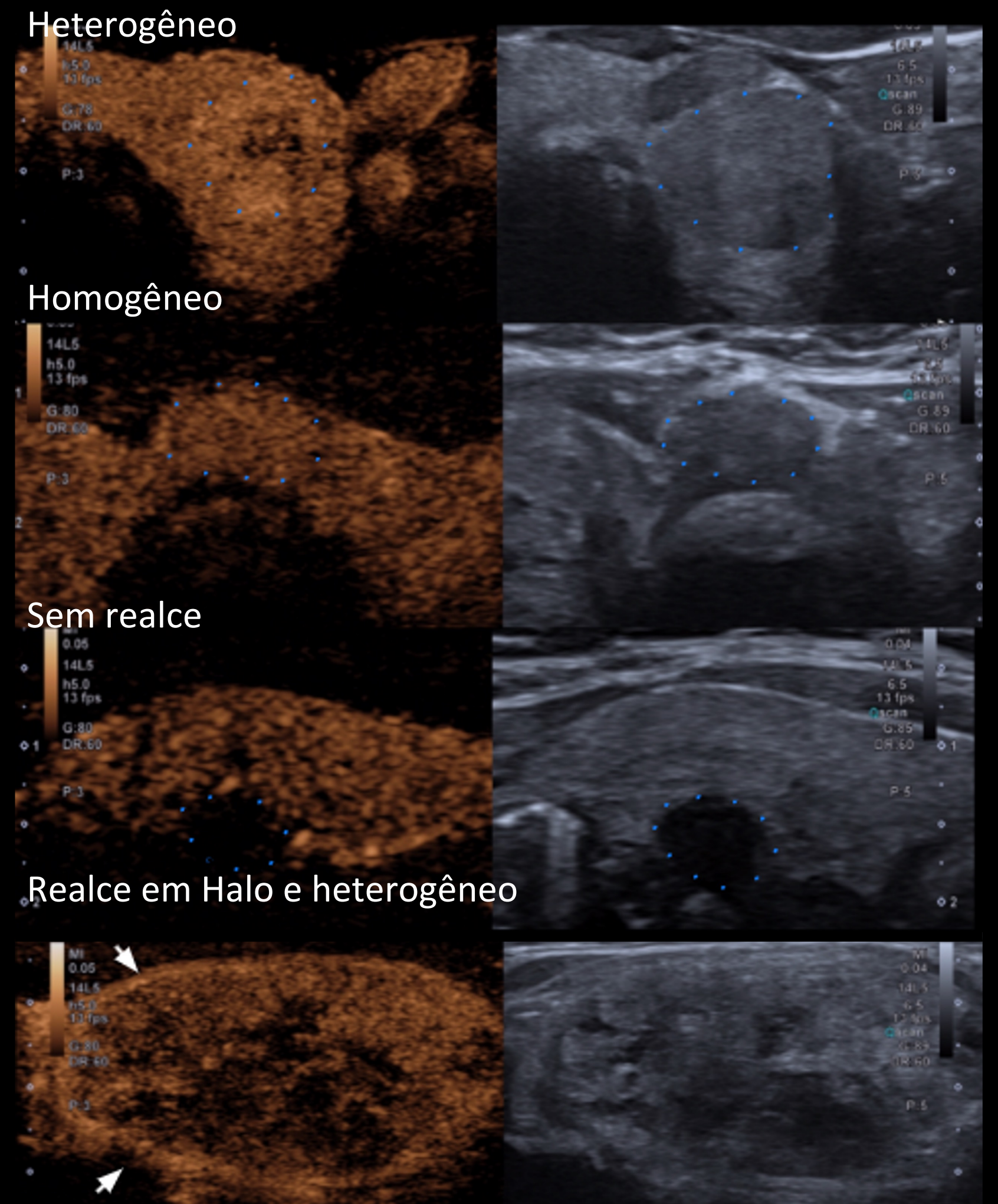




# Área de realce no componente sólido do nódulo

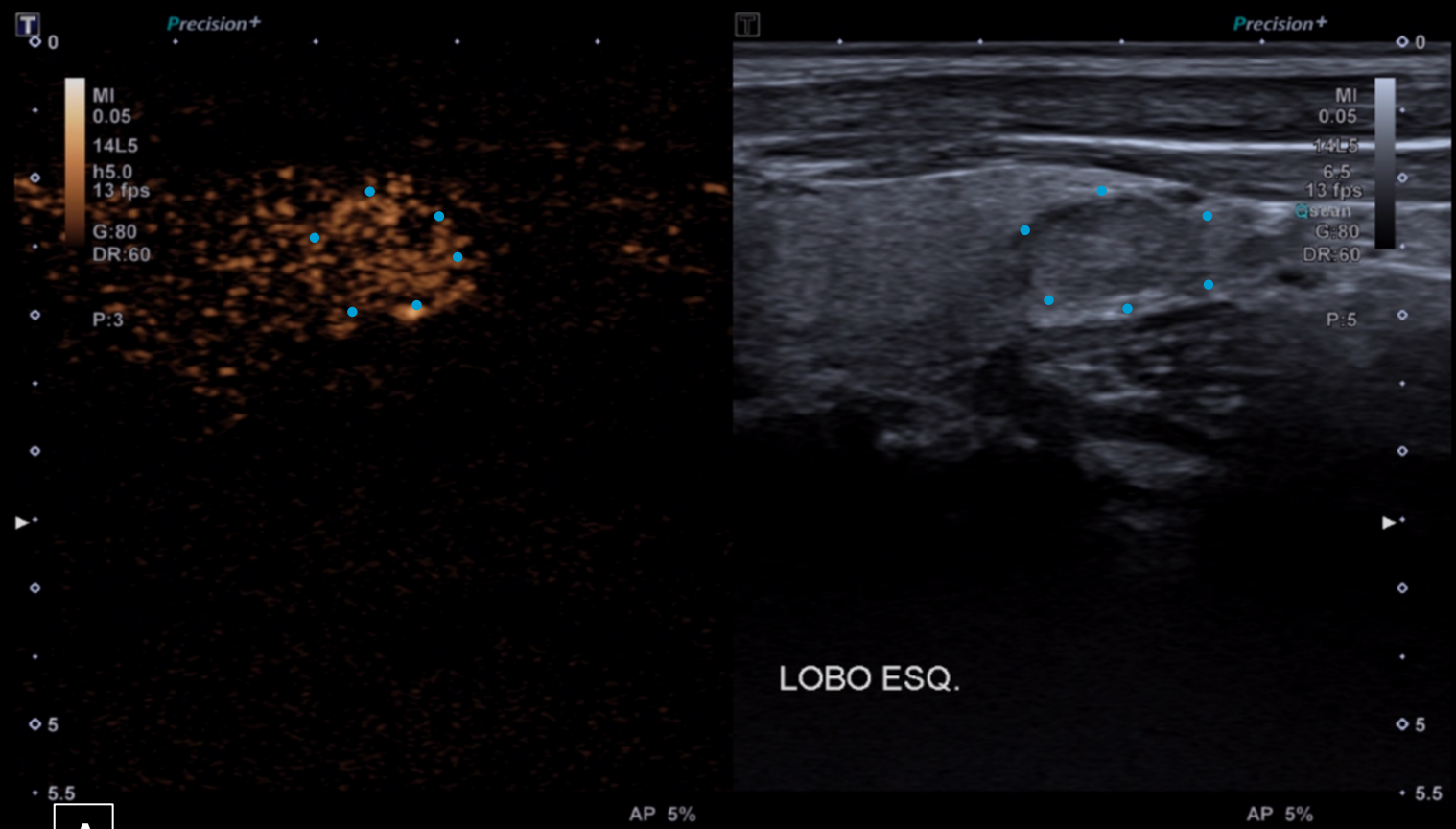


# Tipos de Realce

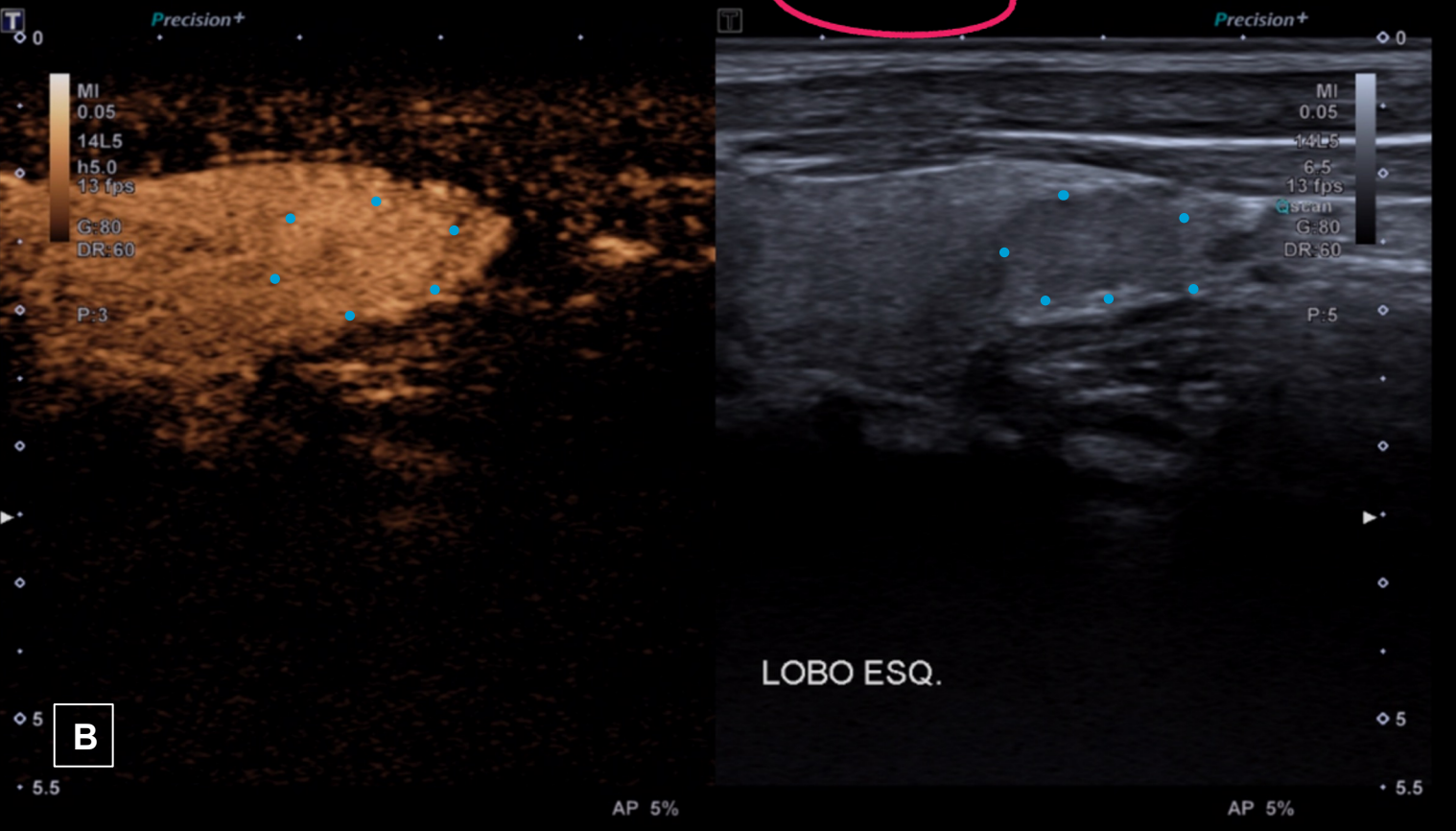




# Wash in no nódulo ANTES do parênquima



A



B

A ( 09:34 )  
B ( 00:17 )

A ( 09:39 )  
B ( 00:23 )

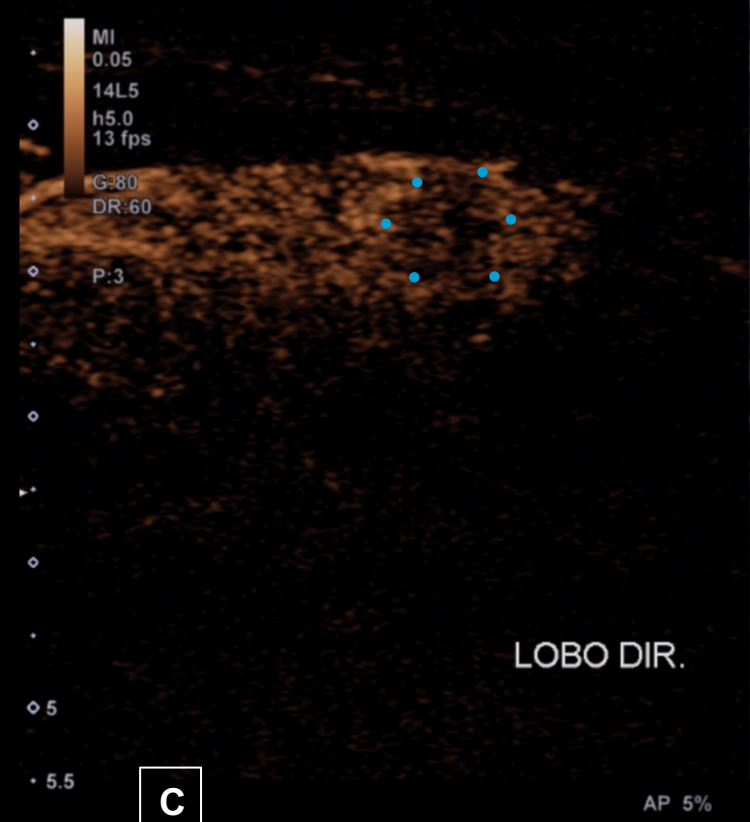
A) Com 17 segundos, o contraste chega no nódulo antes que o parênquima tireoidiano.

B) Com 23 segundos, toda a glândula tireoidiana realça da mesma forma.

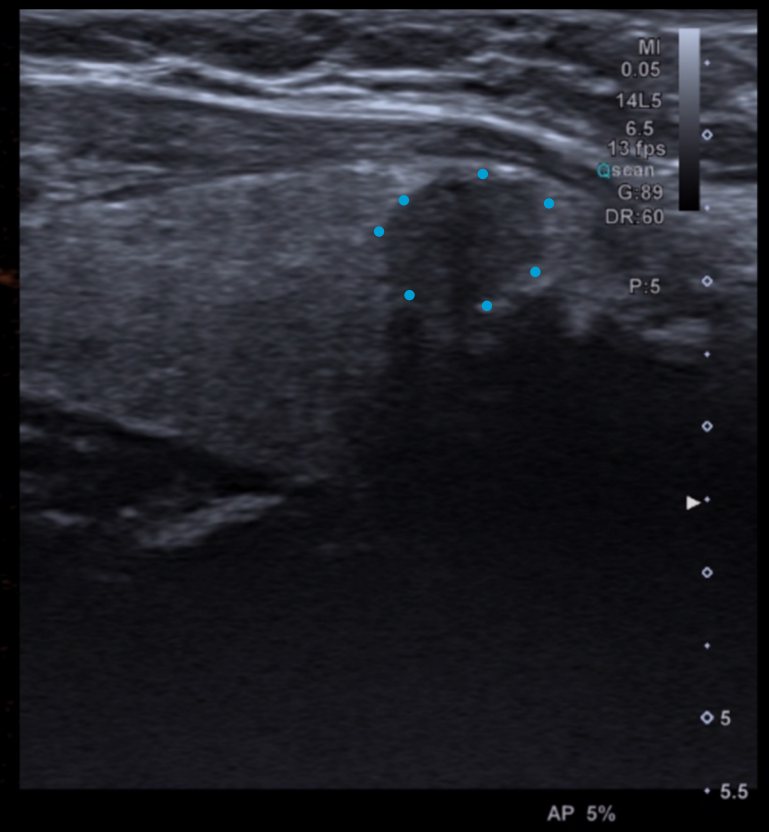
C) Com 14 segundos, o contraste chega primeiro no parênquima tireoidiano e depois no nódulo.

D) Com 20 segundos, toda a glândula tireoidiana realça da mesma forma.

# Wash in no nódulo APÓS o parênquima



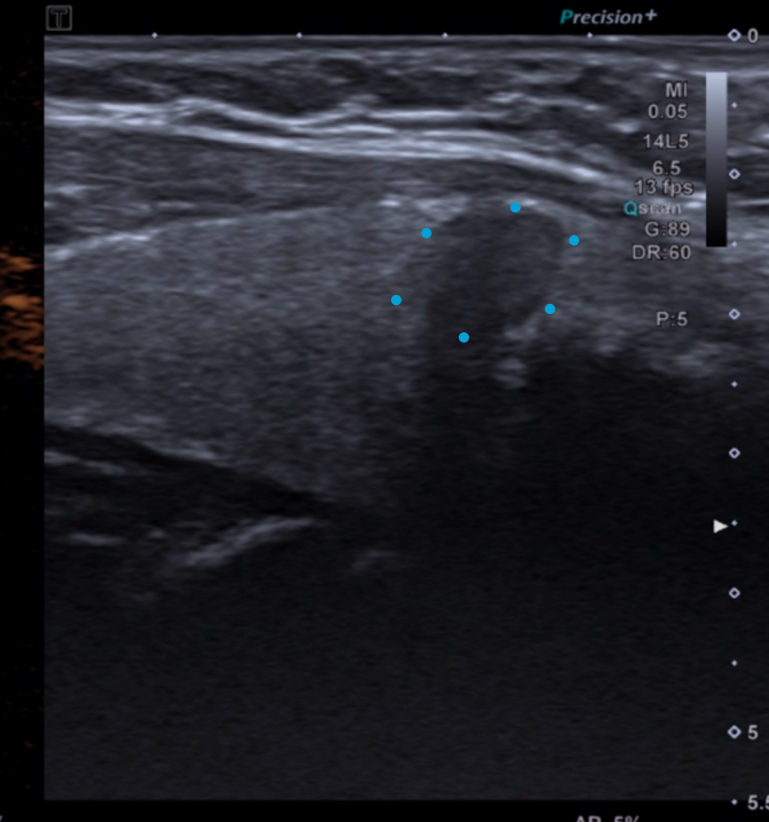
C



A ( 00:14 )



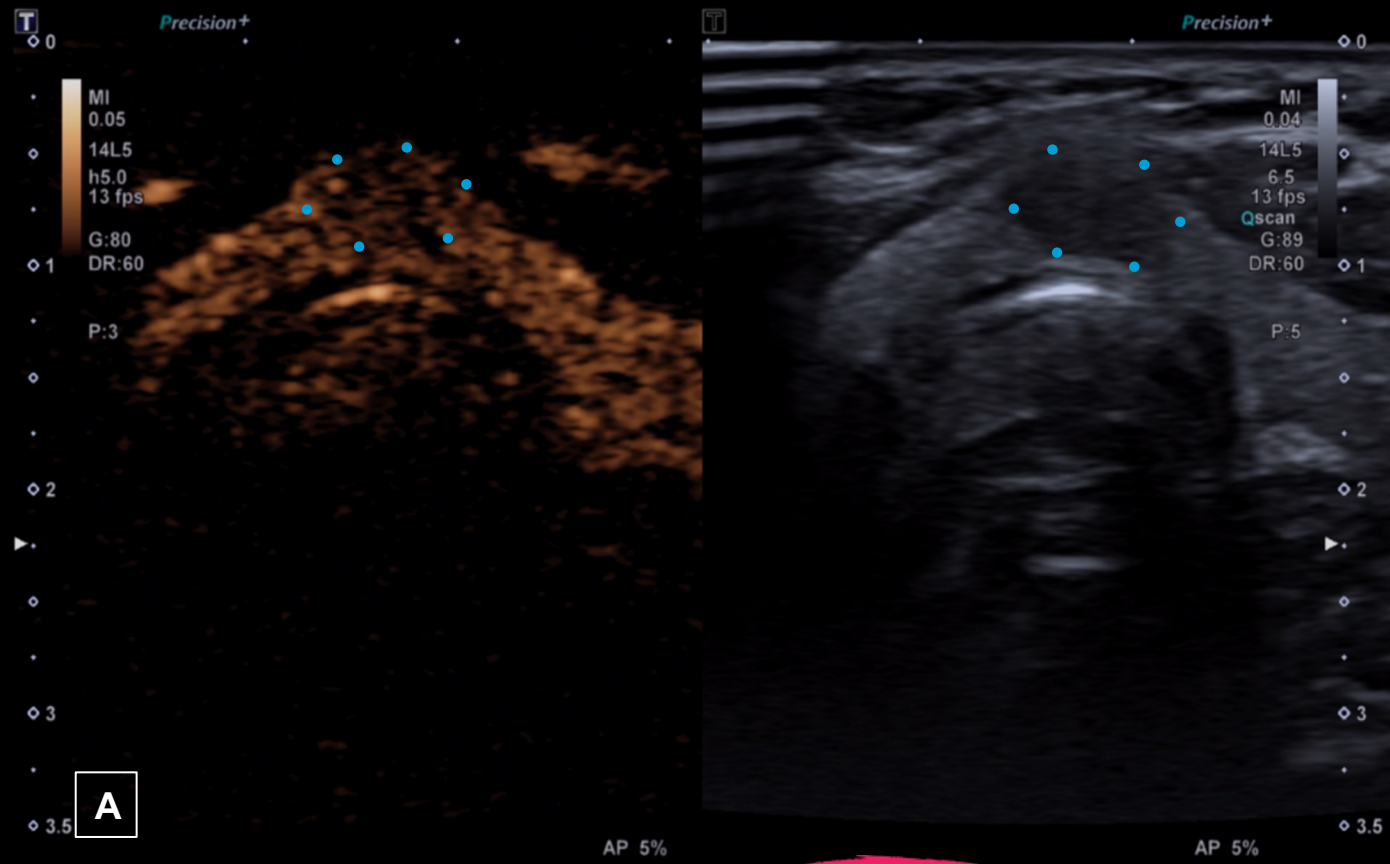
D



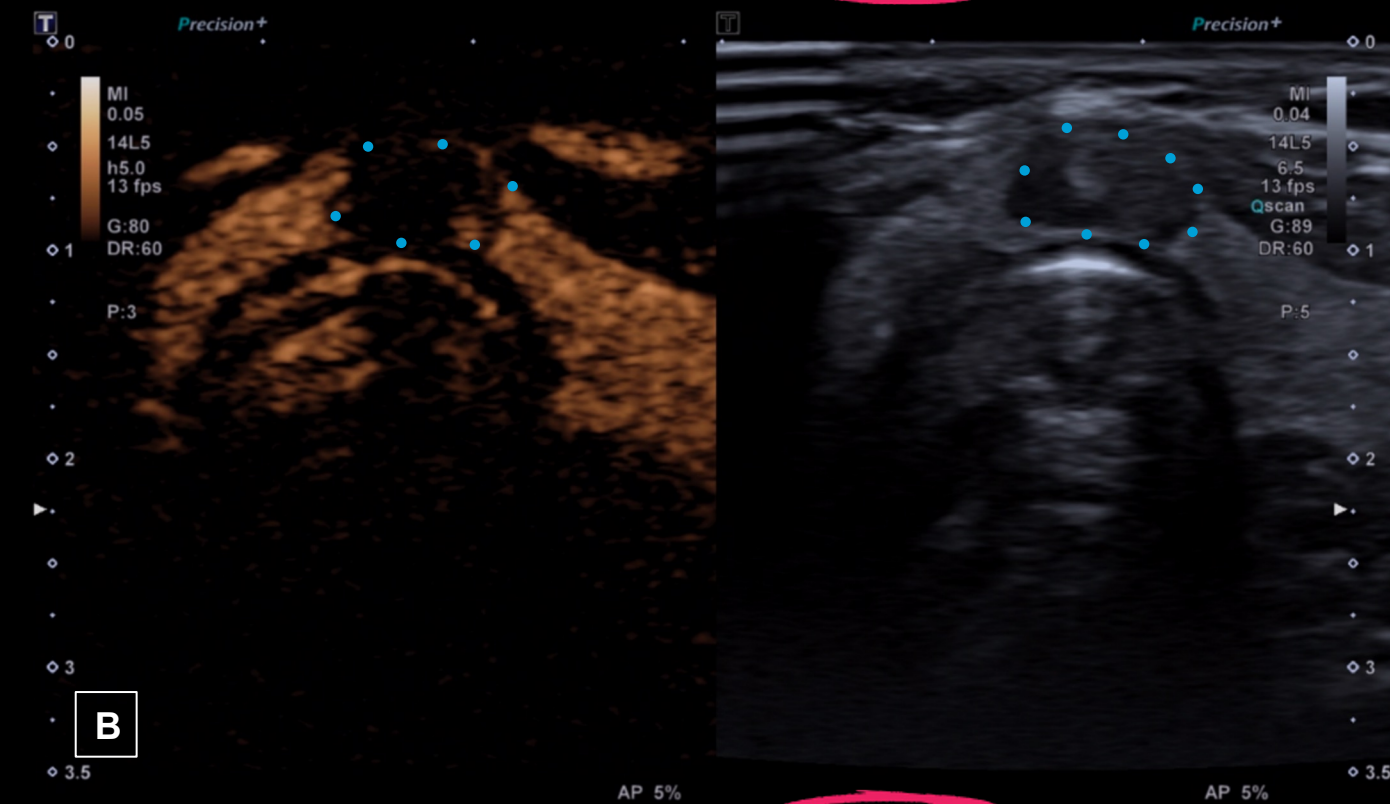
A ( 00:20 )



## Wash out do nódulo antes que o parênquima

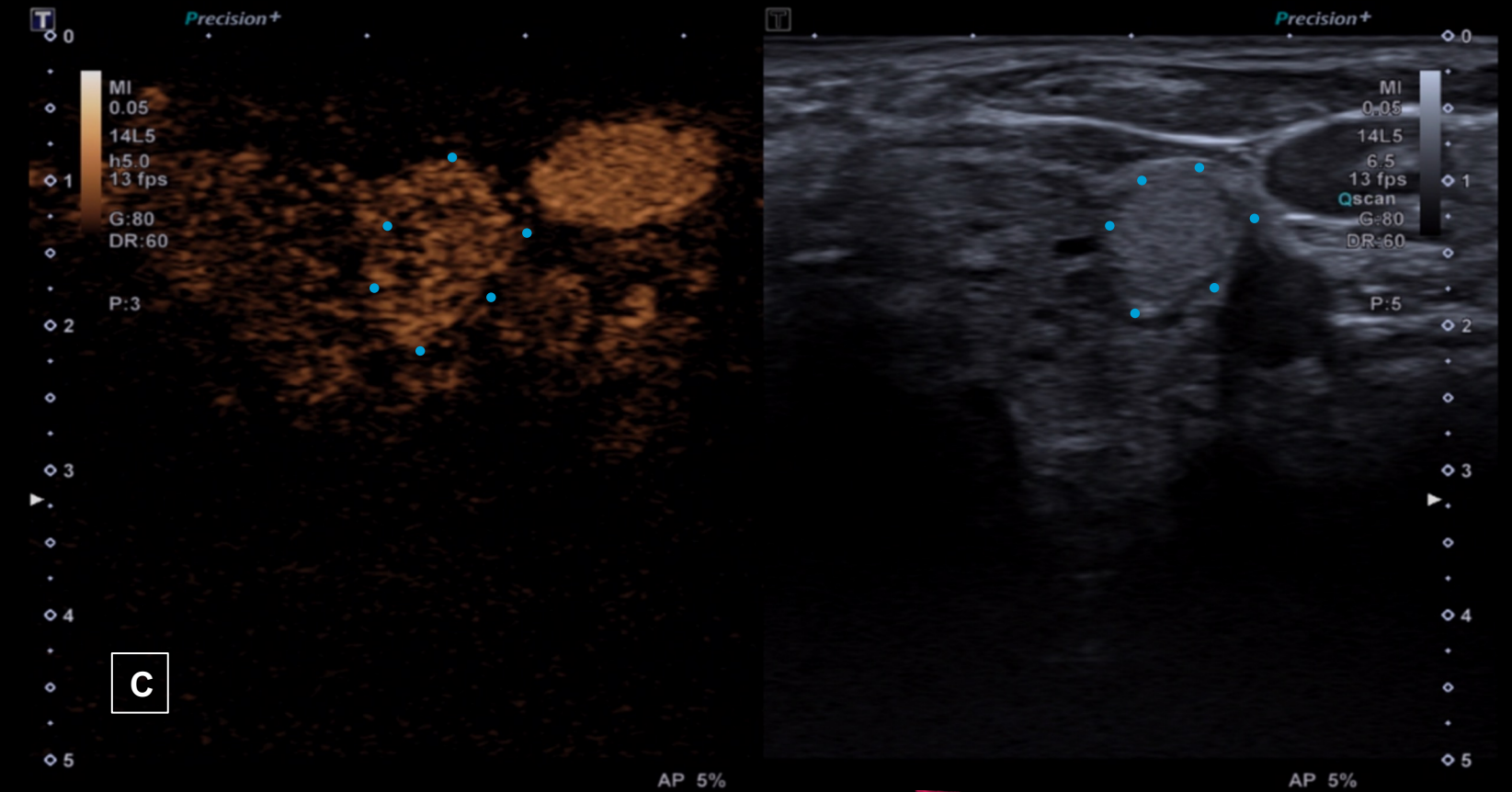


A ( 00:28 )



A ( 00:33 )

## Nódulo sem Wash out



A ( 02:44 )

**A)** Com 28 segundos, nódulo com realce homogêneo e menor que o parênquima tireoidiano.

**B)** Com 33 segundos, mesmo nódulo com *wash out* total.

**C)** Nódulo mantendo o realce por 2min44seg enquanto o parênquima tireoidiano já lavou a maior parte do contraste.

Table 1. CEUS characteristics and associations with malignancy

Characteristic	Nodule classification			GEE Univariate Model		TI-RADS Adjusted	
	Overall, N = 96 <sup>1</sup>	Malignant, N = 44 <sup>2</sup>	Benign, N = 52 <sup>2</sup>	OR (95% CI) <sup>3</sup>	P-value	OR (95% CI) <sup>3</sup>	P-value
<u>Type of Enhancement</u>							
Heterogeneous	69	34 (49%)	35 (51%)	—	—	—	—
Homogeneous	26	10 (38%)	16 (62%)	0.7 (0.3 - 1.6)	0.356	0.5 (0.2 - 1.6)	0.273
Absent	1	0 (0%)	1 (100%)	0.3 (0.0 - 6.7)	0.488	0.3 (0.0 - 14.1)	0.570
<u>Halo/Ring Enhancement</u>							
Absent	38	6 (16%)	32 (84%)	—	—	—	—
Present	58	38 (66%)	20 (34%)	10.1 (3.6 - 28.4)	<b>&lt;0.001</b>	3.8 (1.2 - 12.6)	<b>0.028</b>
<u>Enhanced area</u>							
75-100%	85	37 (44%)	48 (56%)	—	—	—	—
50-75%	3	1 (33%)	2 (67%)	0.6 (0.1 - 7.6)	0.730	0.3 (0.0 - 98.2)	0.653
25-50%	4	3 (75%)	1 (25%)	3.9 (0.4 - 39.6)	0.251	6.2 (0.4 - 108.6)	0.209
0-25%	4	3 (75%)	1 (25%)	3.9 (0.4 - 37.0)	0.237	3.6 (0.4 - 33.6)	0.254
<u>Margin and Shape</u>							
Defined and regular	61	20 (33%)	41 (67%)	—	—	—	—
Defined and irregular	14	11 (79%)	3 (21%)	7.5 (1.9 - 29.9)	<b>0.004</b>	1.7 (0.4 - 7.6)	0.461
Ill delimited	21	13 (62%)	8 (38%)	3.3 (1.3 - 8.8)	<b>0.016</b>	1.1 (0.3 - 4.1)	0.943
<u>Degree of enhancement</u>							
Equal to	50	18 (36%)	32 (64%)	—	—	—	—
Greater than	21	8 (38%)	13 (62%)	1.1 (0.4 - 3.1)	0.848	1.3 (0.4 - 4.5)	0.647
Less than	24	18 (75%)	6 (25%)	5.0 (1.8 - 15.4)	<b>0.002</b>	4.9 (1.4 - 18.2)	<b>0.011</b>
No enhancement	1	0 (0%)	1 (100%)	0.6 (0.0 - 11.6)	0.738	0.4 (0.0 - 17.2)	0.627

Table 1. CEUS characteristics and associations with malignancy

Characteristic	Nodule classification			GEE Univariate Model		TI-RADS Adjusted	
	Overall, N = 96 <sup>1</sup>	Malignant, N = 44 <sup>2</sup>	Benign, N = 52 <sup>2</sup>	OR (95% CI) <sup>3</sup>	P-value	OR (95% CI) <sup>3</sup>	P-value
<u>Contrast arrival</u>							
Together with	69	26 (38%)	43 (62%)	—	—	—	—
Before	9	5 (56%)	4 (44%)	2.1 (0.5 - 8.4)	0.309	1.9 (0.4 - 8.7)	0.426
After	17	13 (76%)	4 (24%)	5.4 (1.6 - 18.1)	<b>0.007</b>	7.0 (1.7 - 28.3)	<b>0.007</b>
<u>Contrast clearance</u>							
Together	60	20 (33%)	40 (67%)	—	—	—	—
Wash out	28	20 (71%)	8 (29%)	4.8 (1.9 - 13.0)	<b>&lt;0.001</b>	3.3 (1.1 - 10.5)	<b>0.040</b>
After	7	4 (57%)	3 (43%)	2.5 (0.6 - 12.4)	0.220	2.9 (0.5 - 16.3)	0.216
<u>Washout time (numerical)</u>	50 (40 - 58)	45 (39 - 58)	50 (50 - 55)	1.0 (0.9 - 1.0)	0.235	1.0 (0.9 - 1.1)	0.539
<u>Washout time (dichotomous)</u>							
< 60 seconds	21	15 (71%)	6 (29%)	—	—	—	—
≥ 60 seconds	7	5 (71%)	2 (29%)	1.0 (0.2 - 5.9)	>0.999	0.4 (0.0 - 6.5)	0.532

Tabela 1: Características qualitativas do CEUS e sua associação com nódulos malignos.

Obs: Em verde, os achados estatisticamente significativos para nódulos benignos e em Vermelho para nódulos malignos.