

**XXIV CONGRESSO**

DA SOCIEDADE PORTUGUESA DE NEUROCIQUIRGIA  
E ENCONTRO NACIONAL DE ENFERMAGEM NEUROCIQUIRGICA

15 A 17 MAIO 2008

CS NUCENEN-ALAVENCOSRIE A SGA SPA



CURSO PRÉ CONGRESSO - AVANÇOS NO TRATAMENTO DA DCR - 14 MAIO 2008 - 14-19H

Workshop "e-Atlas de Recursos para Comunicações Livres" - com curso de "Balanço de e-Atlas" de 10 de abril de 2008  
- Projeto financiado pelo Ministério da Saúde nº 10 de 2007 de 2008

 Sociedade Portuguesa de Neurocirurgia

Organização do Curso	Organização do Congresso	Organização do Encontro	Organização do Curso
Presidente: Dr. João Pedro de Sousa			
Vice-Presidente: Dr. João Pedro de Sousa			
Membros: Dr. João Pedro de Sousa			
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Coordenador: Dr. João Pedro de Sousa			

# Lesões Talâmicas

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# Lesões Talâmicas

- **Neoplasias**
- **Malformações vasculares**
- **Infecciosas**

# Objetivos

- Resultados clínicos
- Imagiológicos
- *Follow-up*
- Abordagens cirúrgicas

# Material e Métodos

- Estudo retrospectivo
- Serviço de Neurocirurgia do Hospital S. Marcos – Braga
- 11/01/2000 a 17/04/2008 (8 anos)
- N=14

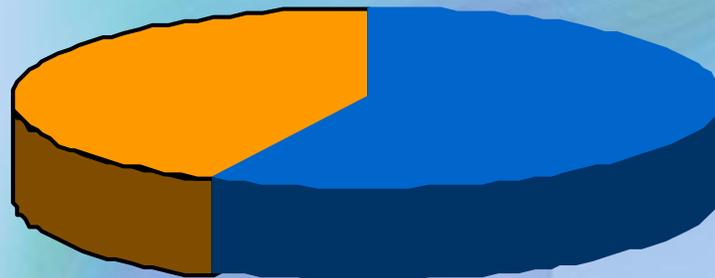


# Resultados

# Distribuição por Sexo

■ Feminino

6  
43%

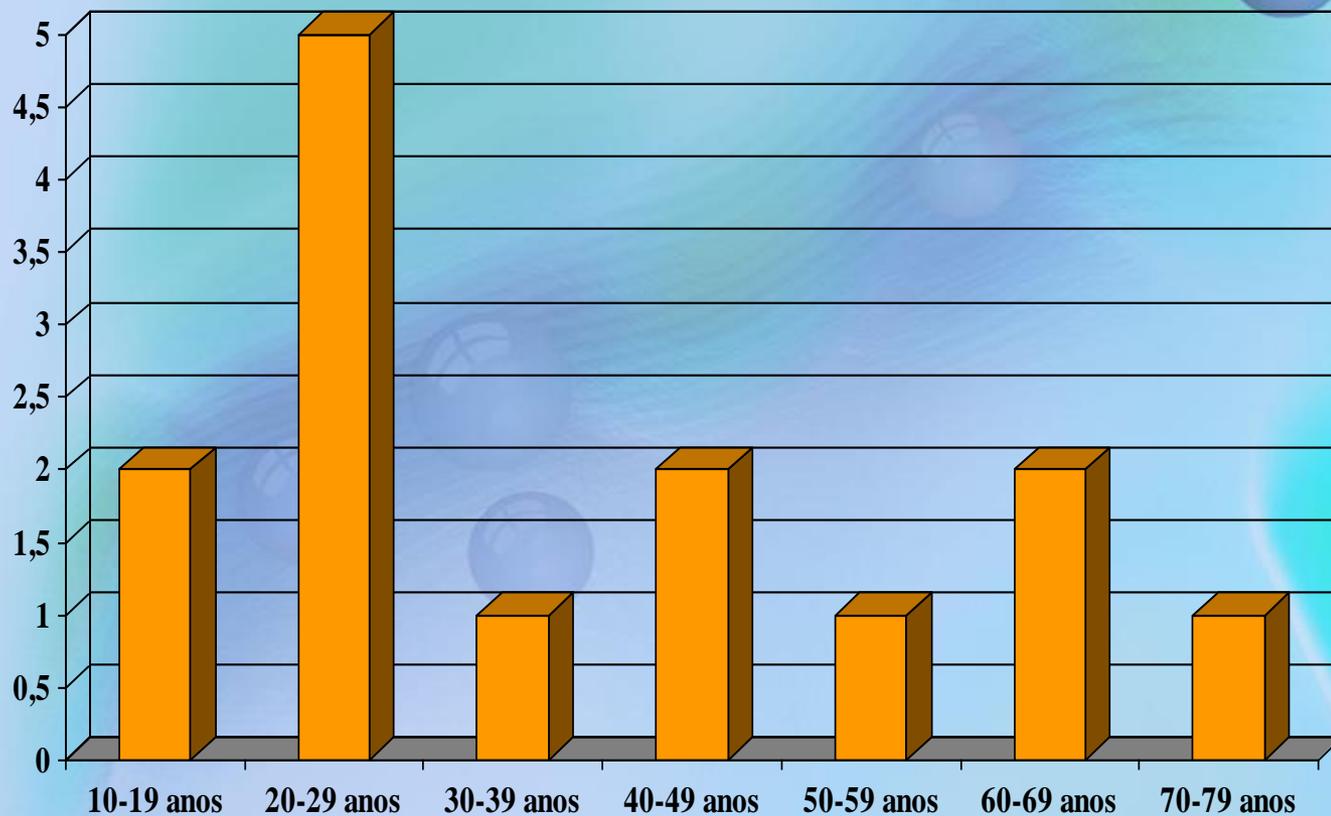


■ Masculino

8  
57%

# Distribuição Etária

- N= 14
- 12-74 anos
- Média: 38 anos
- Mediana: 43 anos



# Sintomas de Apresentação

Cefaleias	11 (79%)
↓ Força muscular	6 (43%)
Náuseas/vômitos	6 (43%)
Parestesias	3 (21%)
Alterações comportamento	2 (14%)
↓ Acuidade visual	2 (14%)
Perda memória	2 (14%)
Alucinações visuais	1 (7%)
Diplopia	1 (7%)

# Défice Neurológico Prévio

Intacto	6 (43%)
Défice	8 (57%)
Hemiparésia	6 (43%)
Desequilíbrio marcha	2 (14%)
Tremor	1 (7%)
Dismetria	1 (7%)
Descoordenação motora	1 (7%)
Oftalmoplegia	1 (7%)

# DVE/Shunt VP/Ventriculostomia Prévia

Nenhum	10 (71%)
DVE	2 (14%)
Shunt VP	1 (7%)
Ventriculostomia	1 (7%)

# Topografia da Lesão

Anterior	2 (14%)
Lateral	1 (7%)
Posterior	6 (43%)
Total	5 (36%)
Direita	8 (57%)
Esquerda	5 (36%)
Bilateral	1 (7%)

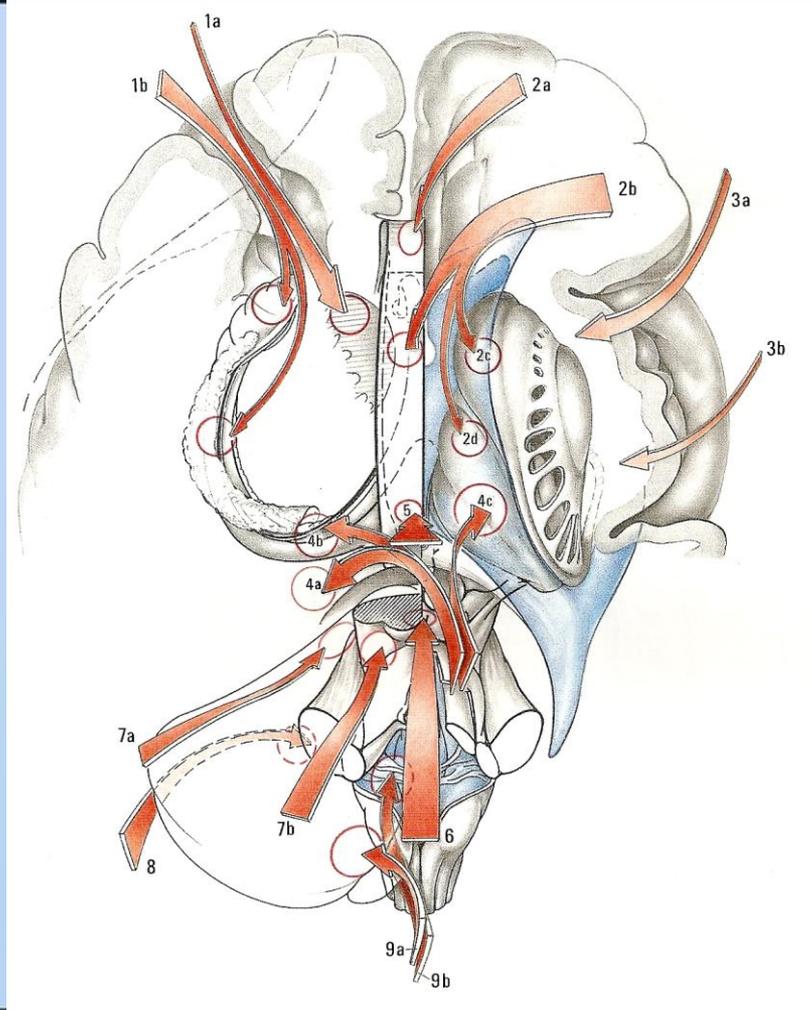
# Histologia

Glioblastoma	6 (43%)
Oligodendroglioma	2 (14%)
Astrocitoma fibrilar	1 (7%)
Germinoma	1 (7%)
Ependimoma	1 (7%)
Angioma cavernoso	3 (21%)
Neoplasia	11 (79%)
Malformação vascular	3 (21%)

# Resultados Cirúrgicos

BSTX apenas	5 (36%)
Craniotomia	9 (64%)
Ressecção total	3 (33%)
Ressecção parcial	6 (67%)
Pós-operatório (N=14)	
Melhoria	3 (21%)
Sem alterações	5 (36%)
<i>Impairment</i>	6 (43%)
Morte	0 (0%)

# Abordagens



# Abordagem

Transcalosa interhemisférica anterior	5
Transcalosa interhemisférica posterior	1
Supratentorial suboccipital	2
Infratentorial supracerebelosa	3

# Reintervenções

- 2 reintervenções

- Recidiva tumoral (ependimoma) – 3 meses
- Ressangramento (angioma cavernoso) – 1 mês

# Morbilidade Cirúrgica

Hidrocefalia (DVP)	3 (21%)
Oftalmoplegia	3 (21%)
Hemorragia loca	2 (14%)
Alterações memória e comportamento	2 (14%)
Bolsa LCR	2 (14%)
Fístula LCR	1 (7%)
Meningite	1 (7%)
Tremor	1 (7%)
Higroma	1 (7%)
Hemiparésia de novo	1 (7%)
Agravamento hemiparésia	1 (7%)
Ataxia	1 (7%)
Síndrome demencial	1 (7%)

# Follow-up

	Neoplasia	Malformação vascular
Morto	7	0
Vivo	1	3
Sobrevida média	9,1 meses	-

3 doentes abandonaram a consulta

# *Follow-up* - Neoplasias

Neoplasia	N= 8	Sobrevida média
Glioblastoma	5	9,4 meses
Ependimoma	1	10,5 meses
Oligodendroglioma	1	6,5 meses
Germinoma	1	Vivo (51 meses)

# *Follow-up* - Neoplasias

	BSTX	BSTX + RT	Craniotomia	Craniotomia + RT + QT
Morto	1	0	2	4
Vivo	0	1	0	0
Sobrevida média	1 mês	(51 meses)	5 meses	13,3 meses

# *Follow-up* - Neoplasias

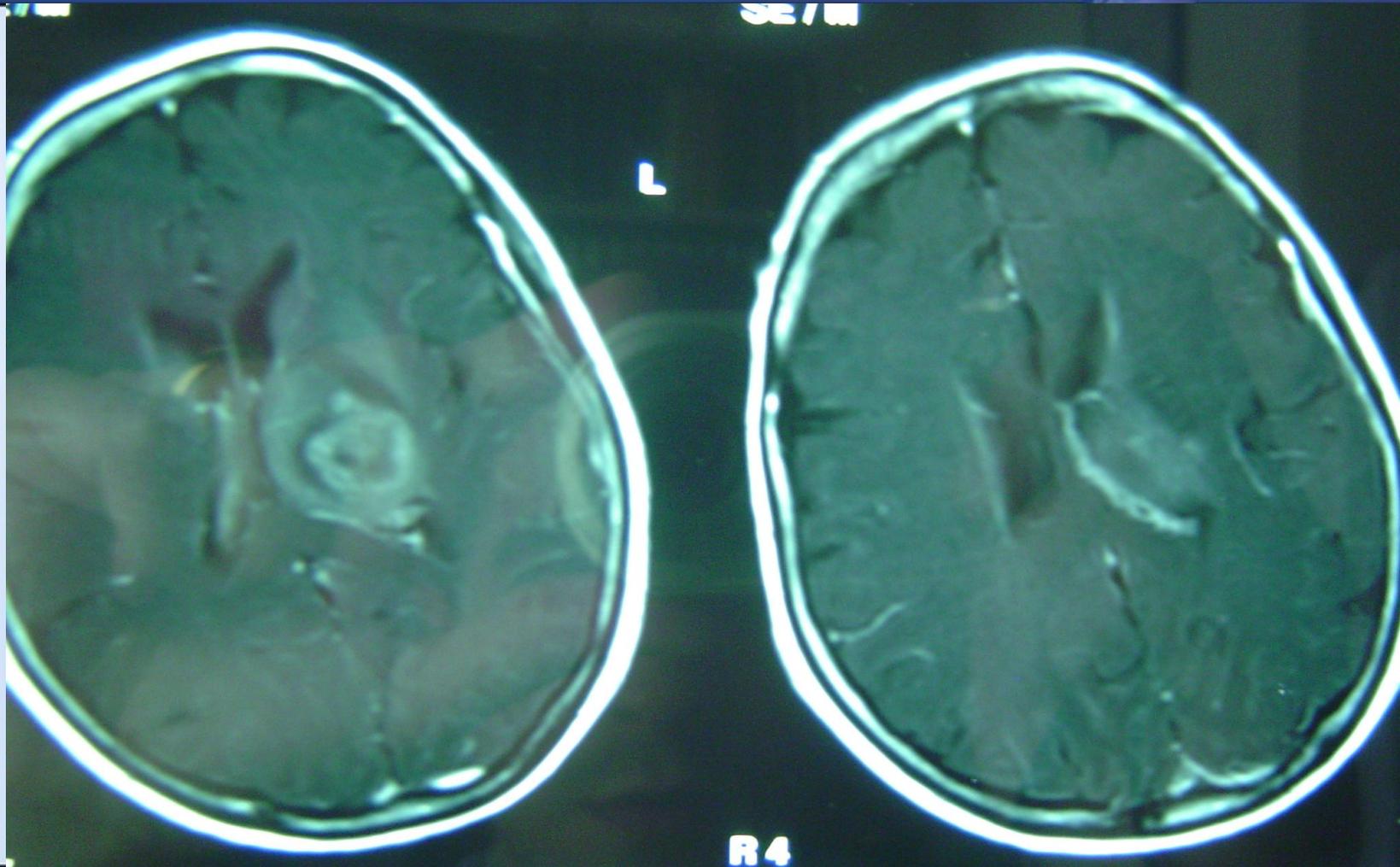
Neoplasias	N	Sobrevida média
Ressecção total	2	13,8 meses
Ressecção parcial	4	8,9 meses

# *Follow-up* - Neoplasias

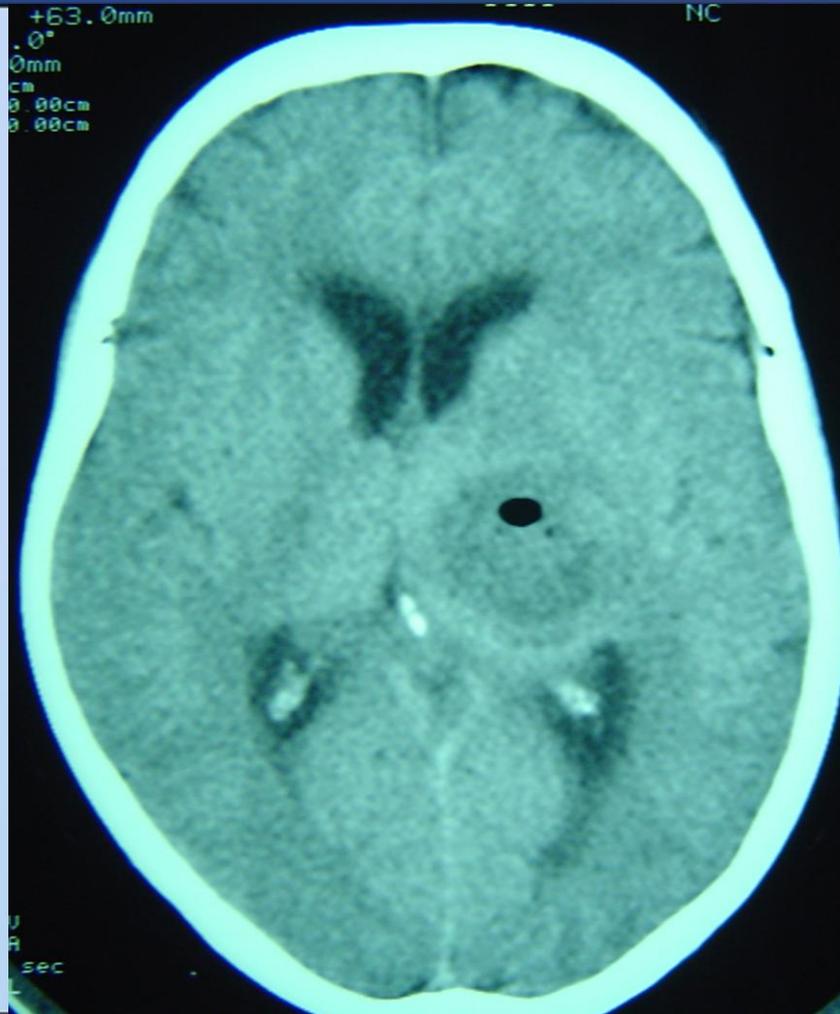
- Síndrome Turcot (GBM + polipose cólica familiar) – 13 meses
- Carcinomatose meníngea (glioblastoma) – 16 meses  
- 1 mês sobrevida
- Mtx intradural L2-L3 (glioblastoma) – 6,5 meses  
- 6 meses sobrevida
- Mtx= 14% (1,5-4,0%)
- Idade média= 26,5 anos (38,4 a)
- Sobrevida após mtx 3,5 meses (2,5 m)

Jung et al: Neuroaxis Dissemination Pattern and Prognosis. Neurosurg Q. Volume 17.  
Number 3, 2007

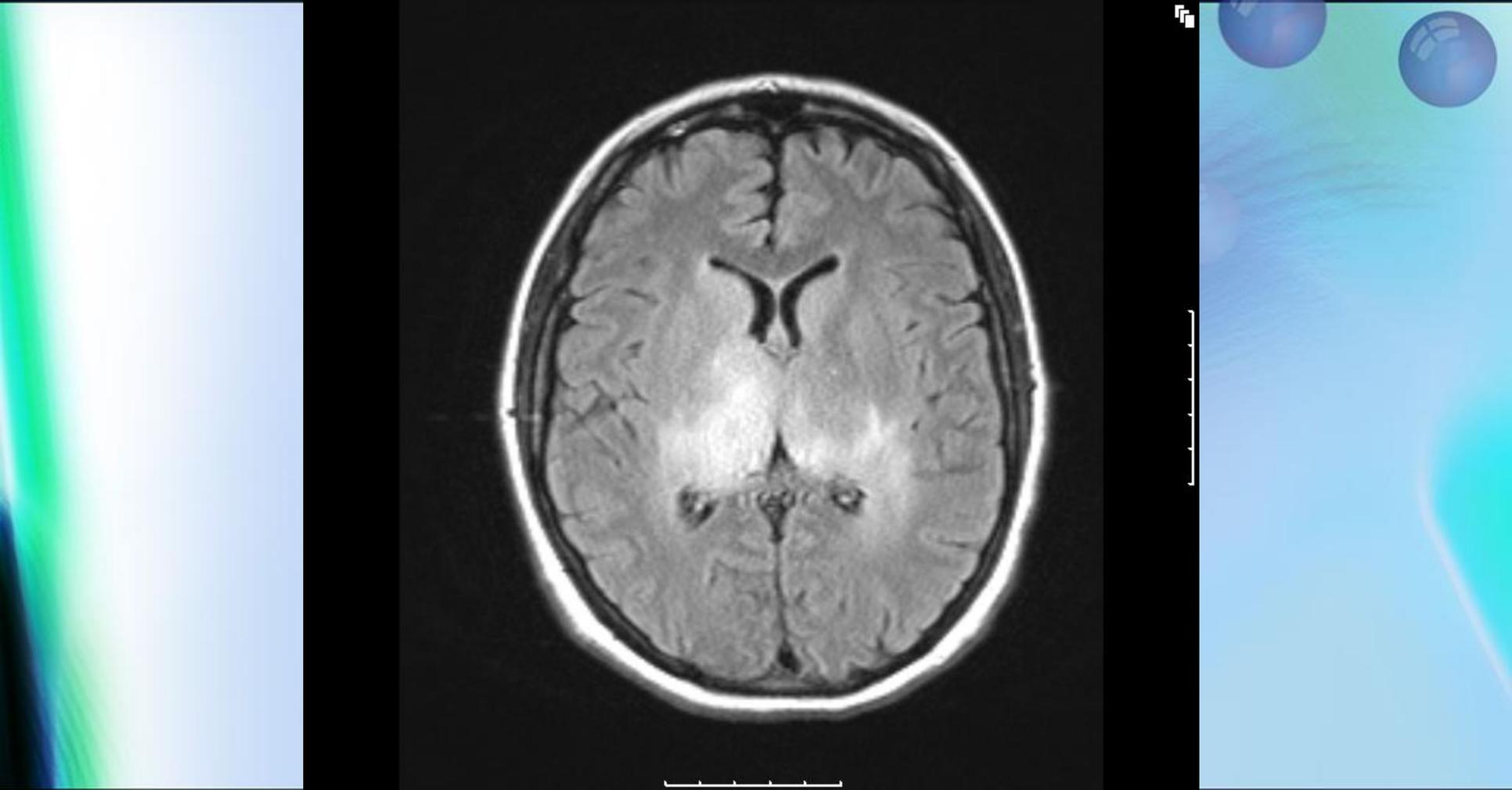
♂, 60a, glioblastoma



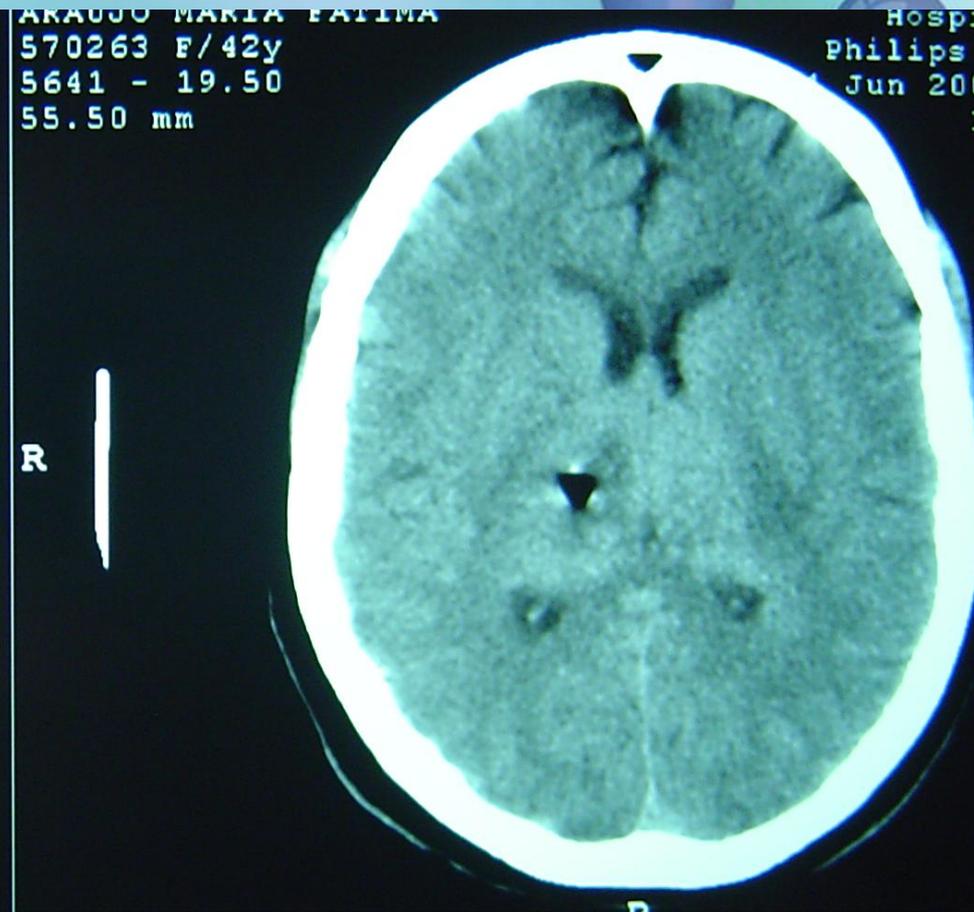
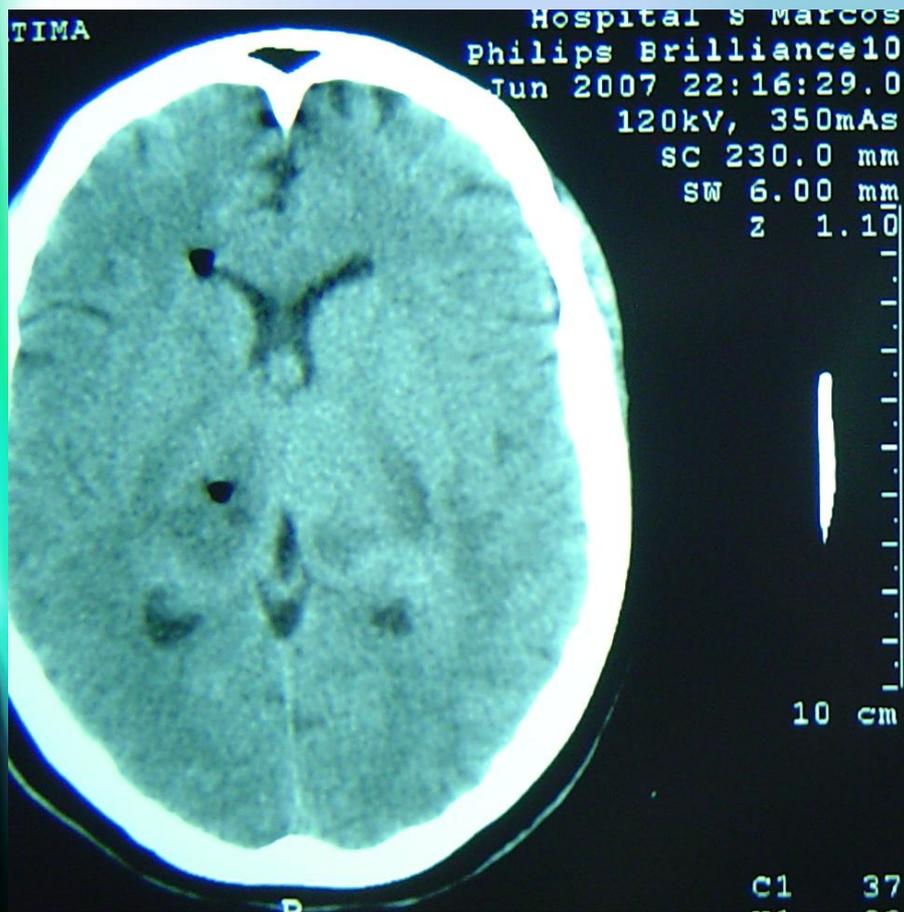
♂, 60a, glioblastoma



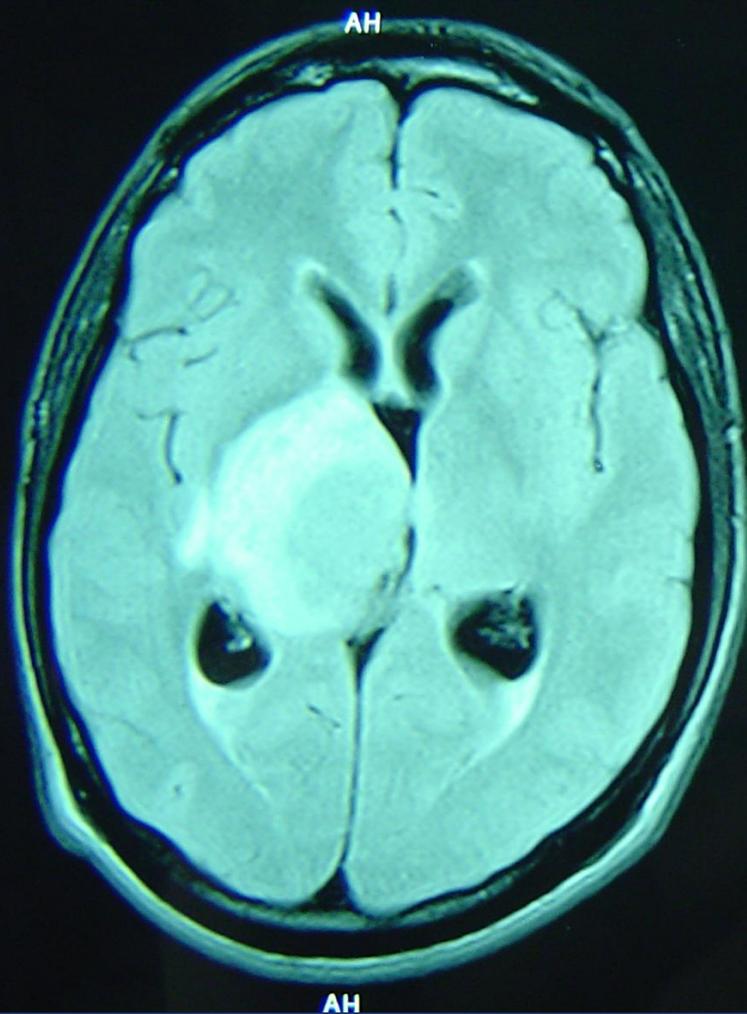
♀, 42a, astrocitoma fibrilar



# ♀, 42a, astrocitoma fibrilar

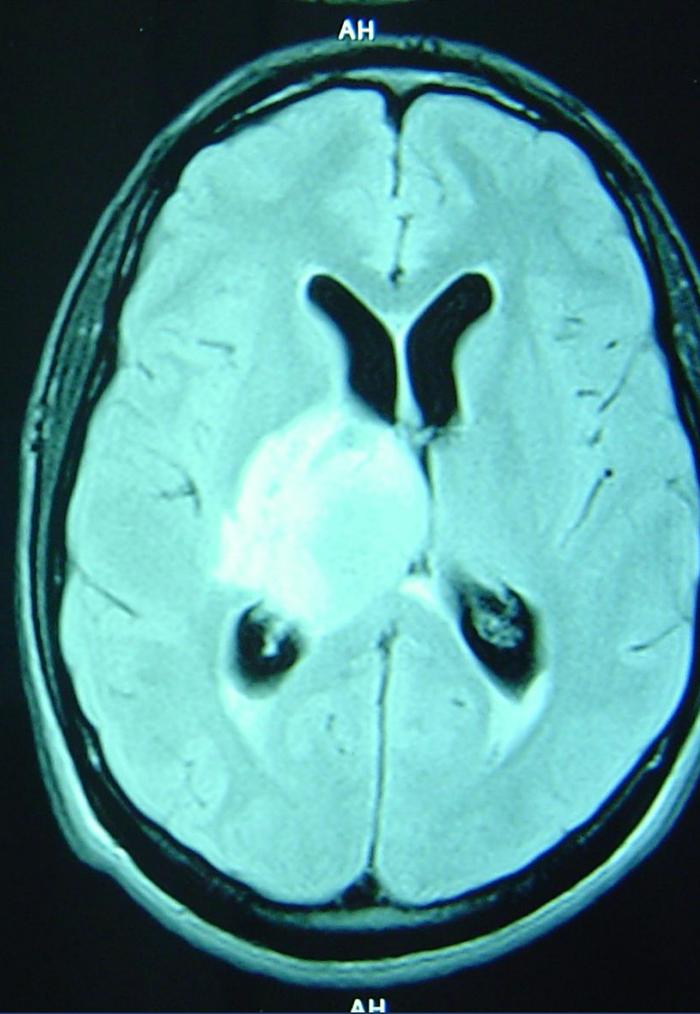


♂, 23a, germinoma (51 meses)

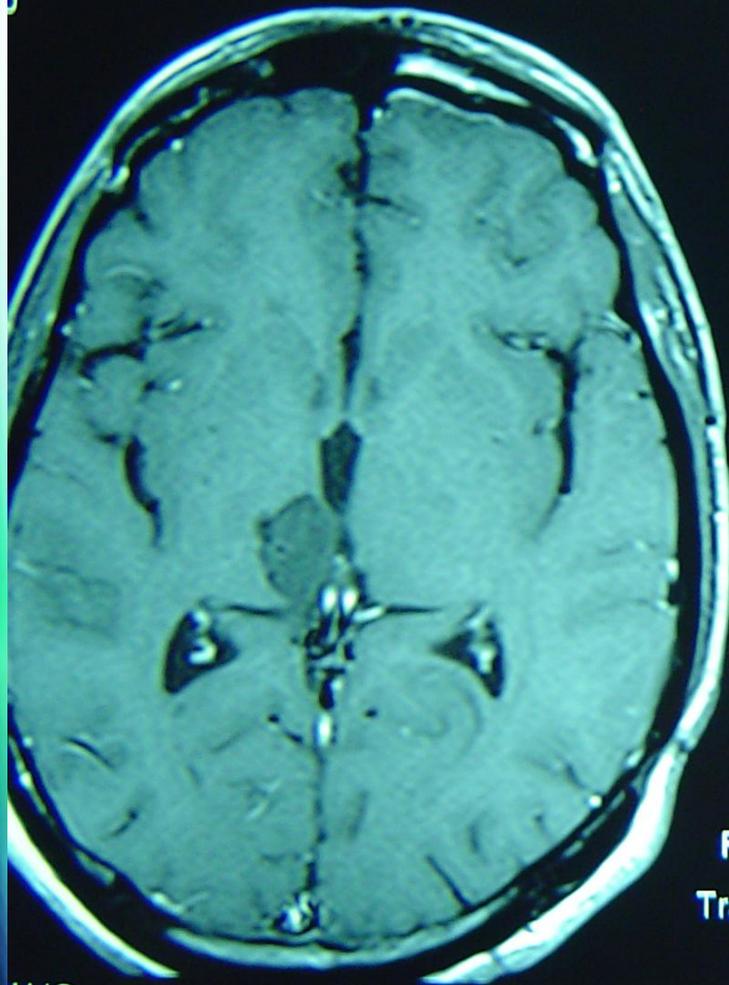


RFA

TE 108.0



♂, 23a, germinoma (51 meses)



4VA15A \*20/07/1980  
HFS  
+LPH STUDY 1  
→ 03/04/2007  
17:09:21  
16 IMA 12

5cm  
R

I/R  
TP 0  
SP H30.0 TR 459.0  
SL 3.0 TE 15.0  
FoV 201\*230 TA 03:50  
168\*256s M/CV19  
Tra>Cor(-10.6)  
W 700 A3  
C 393 \*se2d1 / 90

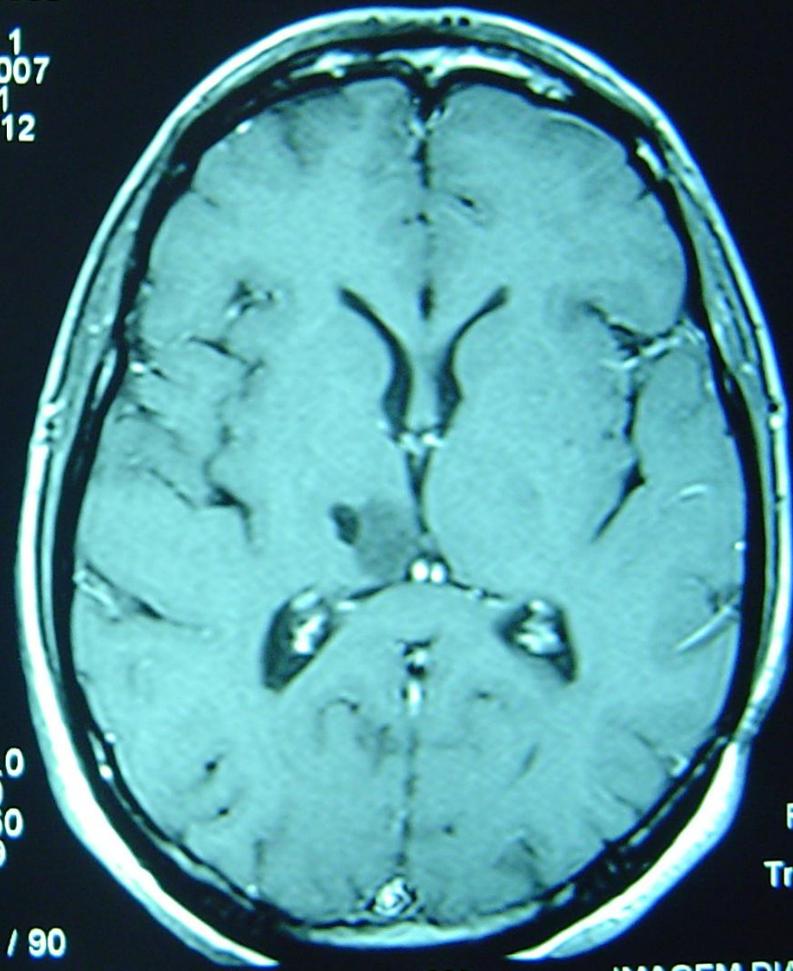
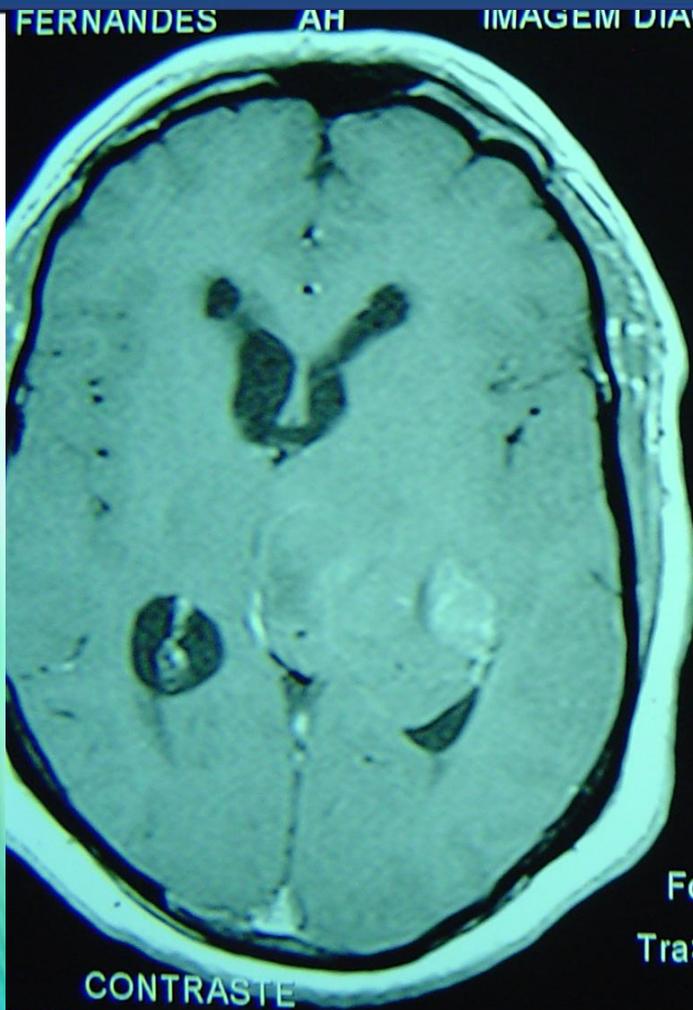


IMAGEM DIAG

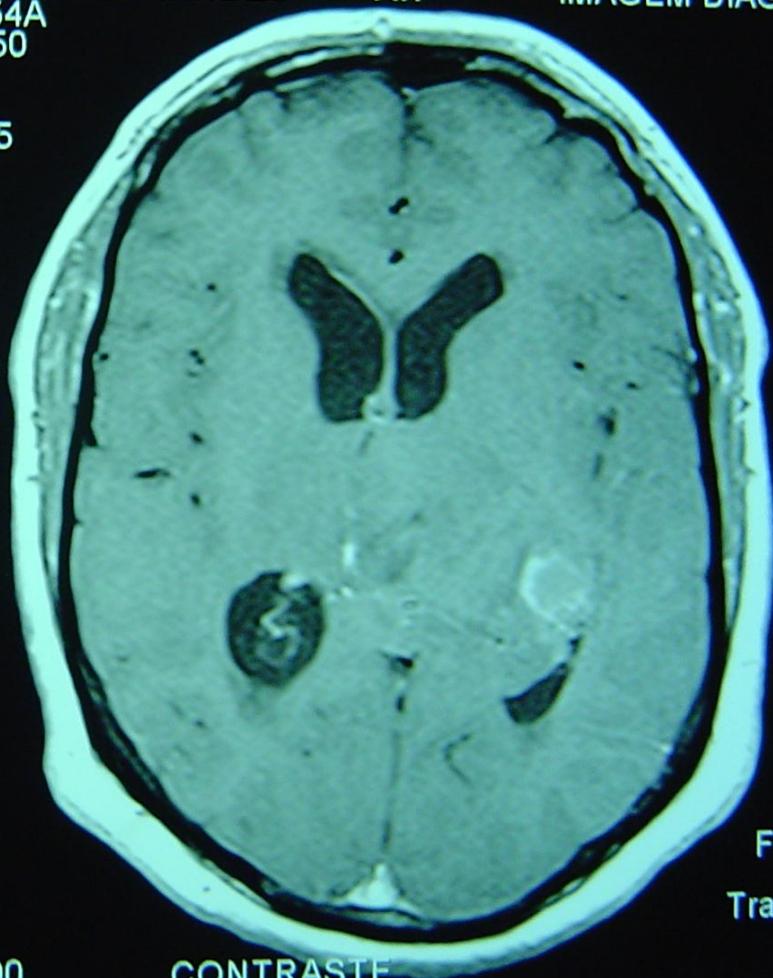
# ♂, 54a, glioblastoma (3,5 meses)



FERNANDES AH IMAGEM DIAGNOSTICA DIAMANTINO FERNANDES AH IMAGEM DIAGN  
Symphony 240850 54A  
4VA15A \*24/08/1950  
HFS  
+LPH → STUDY 1  
13/05/2005  
17:39:25  
23 IMA 11

R  
5cm

I/R  
TP 0  
SP H28.9 TR 459.0  
SL 3.0 TE 15.0  
FoV 186\*230 TA 03:34  
156\*256s M/CV19  
Tra>Cor(-18.3)  
W 506 A3  
C 291 \*se2d1 / 90



CONTRASTE

♂, 54a, glioblastoma (3,5 meses)

DIAMANTINO

Hospital S Marcos  
Philips Brilliance10  
6 Jun 2005 13:35:31,0  
120kV, 350mAs  
SC 230,0 mm  
SM 6,00 mm  
Z 1,10

FERNANDES DIAMANTINO  
517117 M/54y  
38336 - 27,90  
901,50 mm

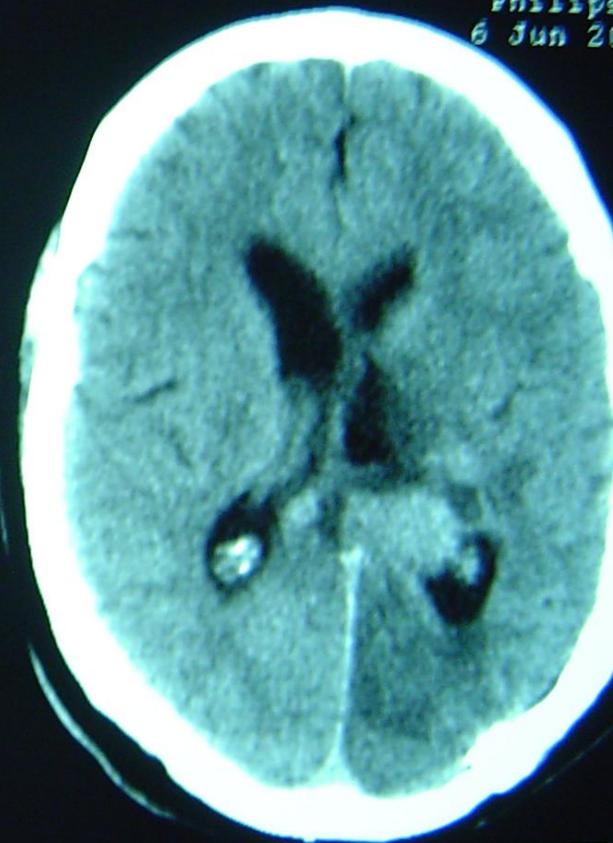
Hos  
Philip  
6 Jun 20



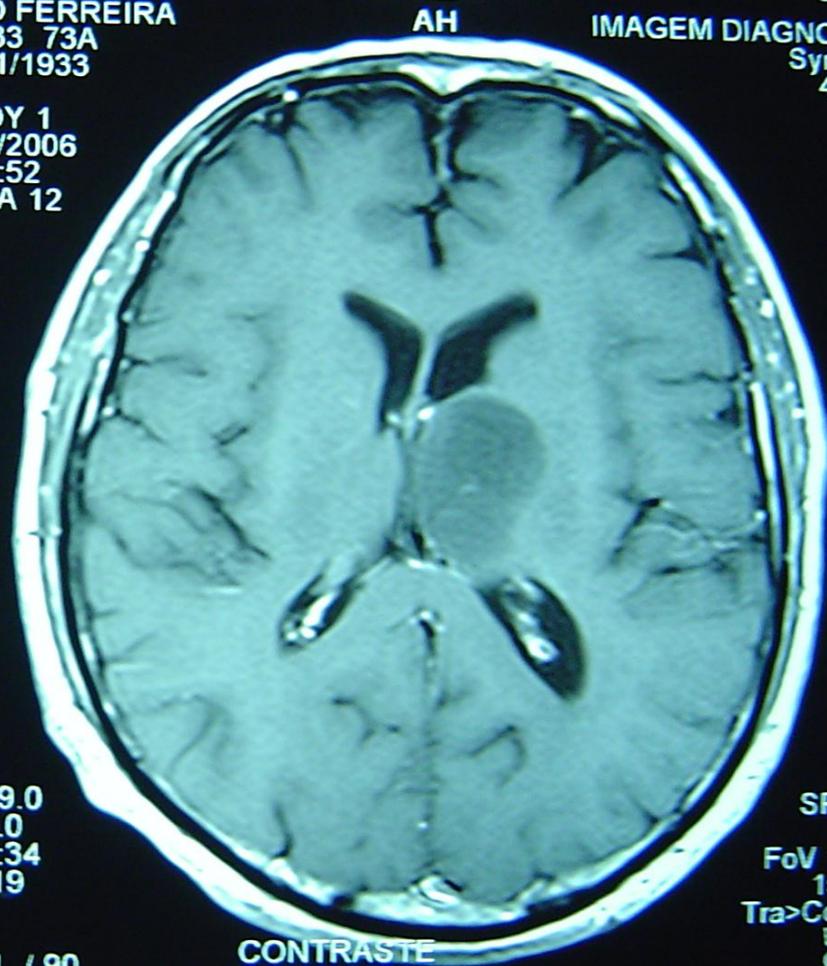
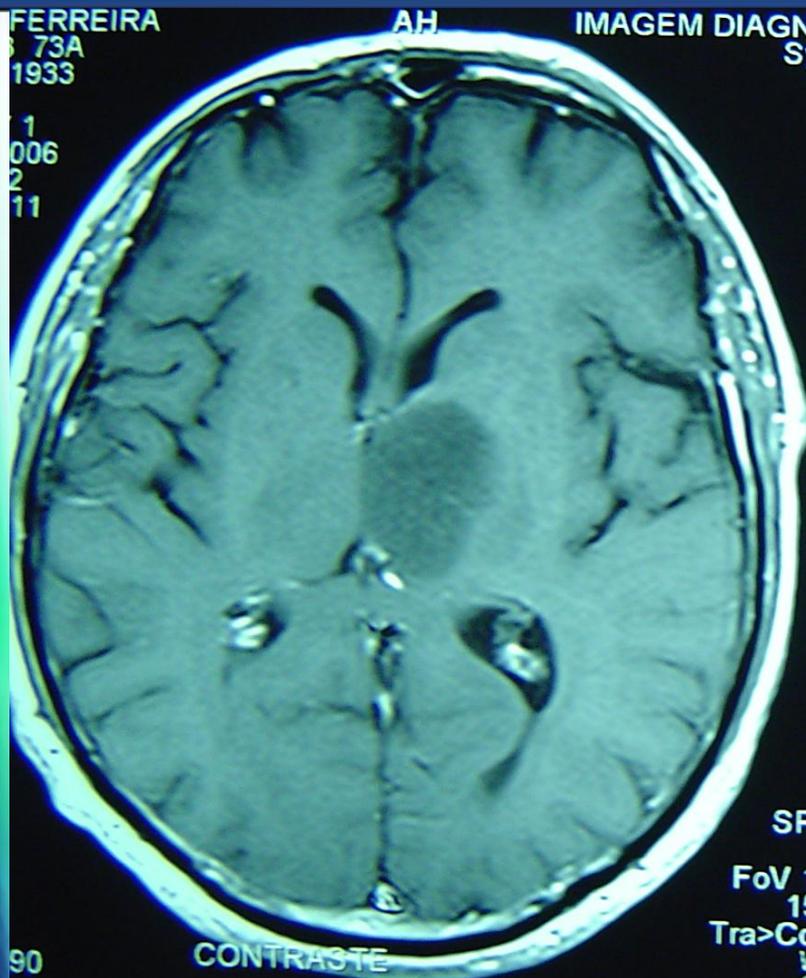
10 cm

21 35  
W1 70

R



# ♂, 74a, oligodendroglioma (6,5 meses)



I/R  
TP 0  
SP H23.0 TR 459.0  
SL 5.0 TE 15.0  
FoV 186\*230 TA 03:34  
156\*256s M/CV19  
Tra>Cor(-20.0)  
W 550 A3  
C 326 \*se2d1 / 90

# ♂, 74a, oligodendroglioma (6,5 meses)

FERREIRA, JOAO, CASIMIRO

C: 35.0, W: 70.0

109260

Contrast:

Gantry: -30°

FoV: 276 mm

Time: 879 ms

Slice: 6 mm

Pos: 153.5

HFS

F: EB

398 mA

120 kV

Image no: 28

Image 13 of 17

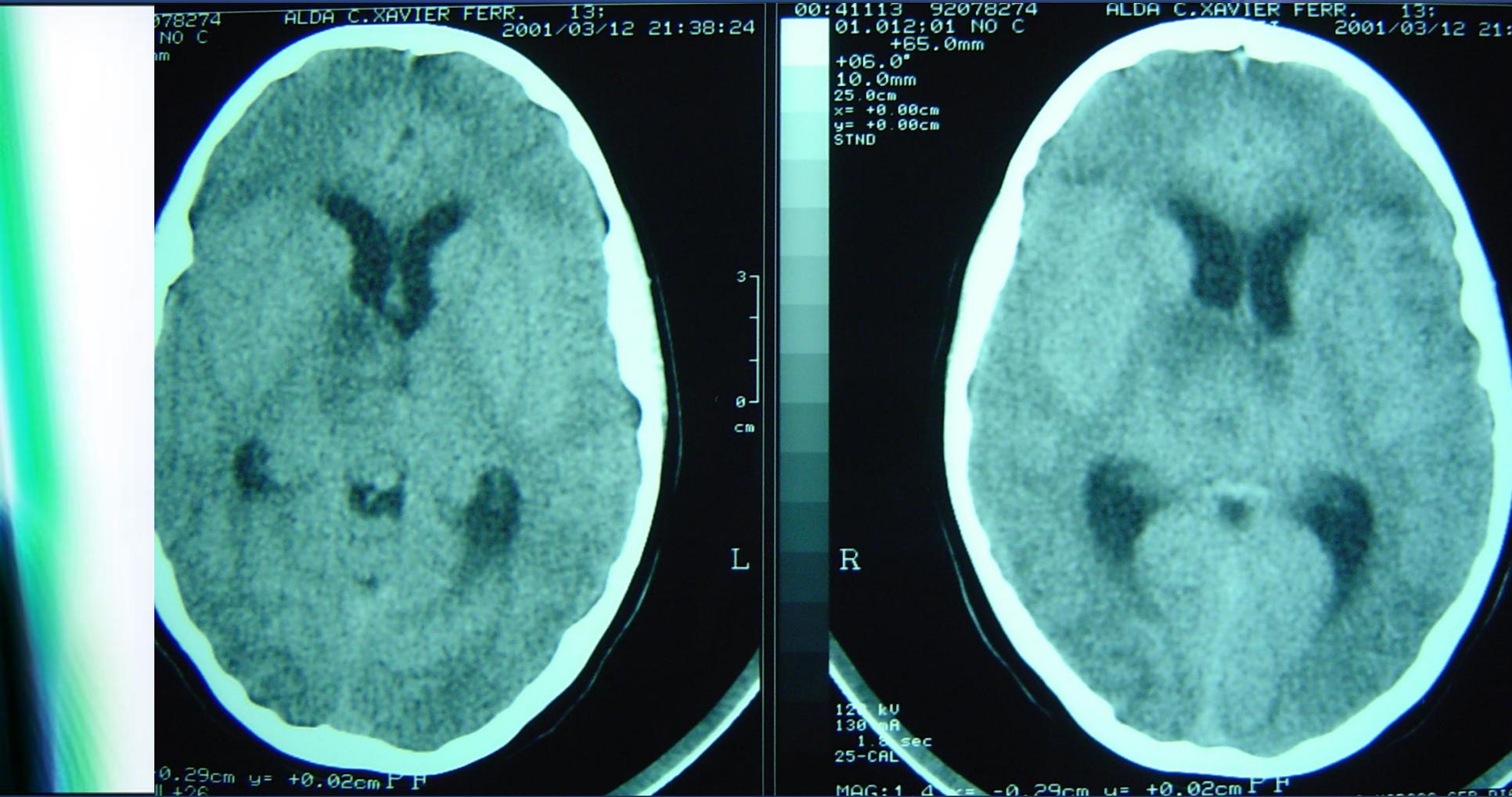
12-04-2007, 23:03:15



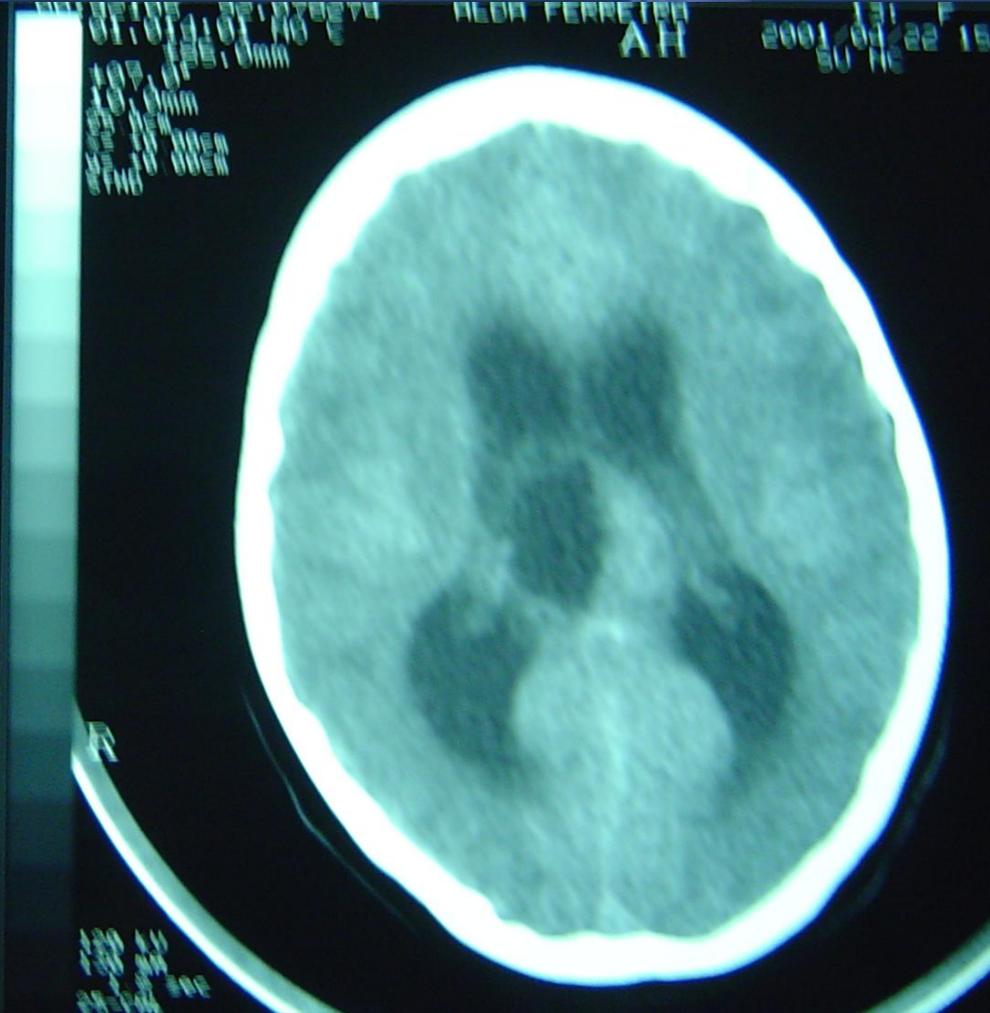
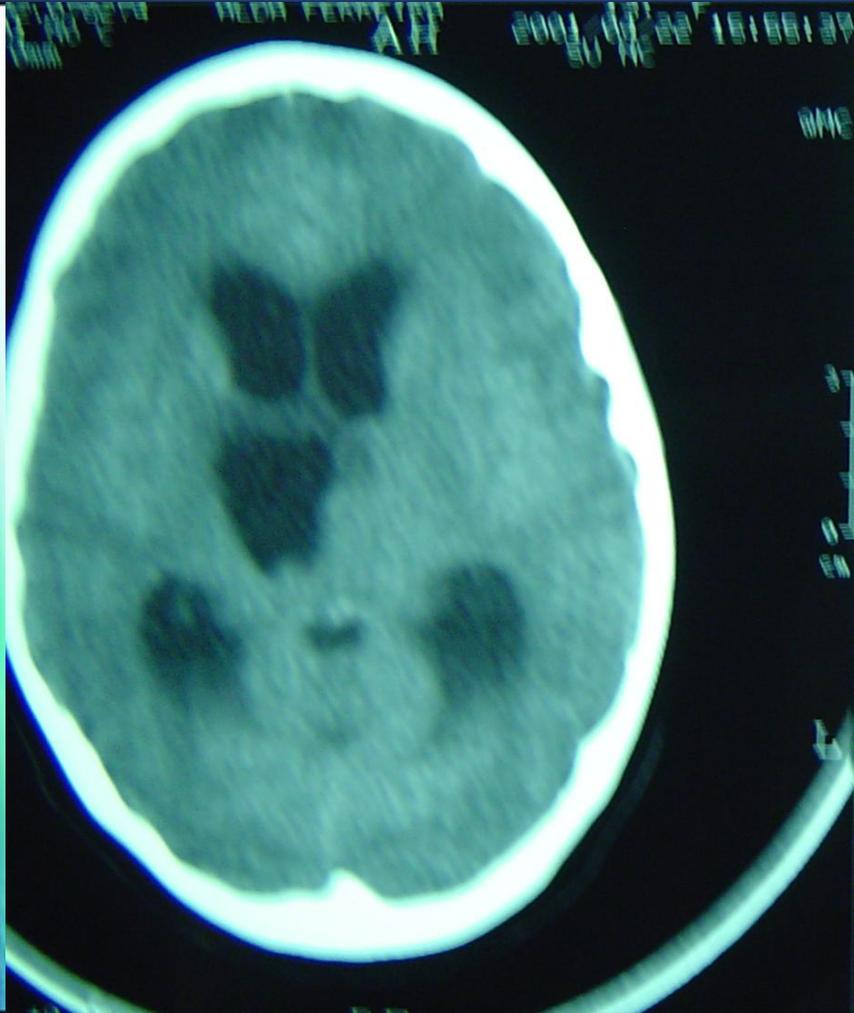
P

A2

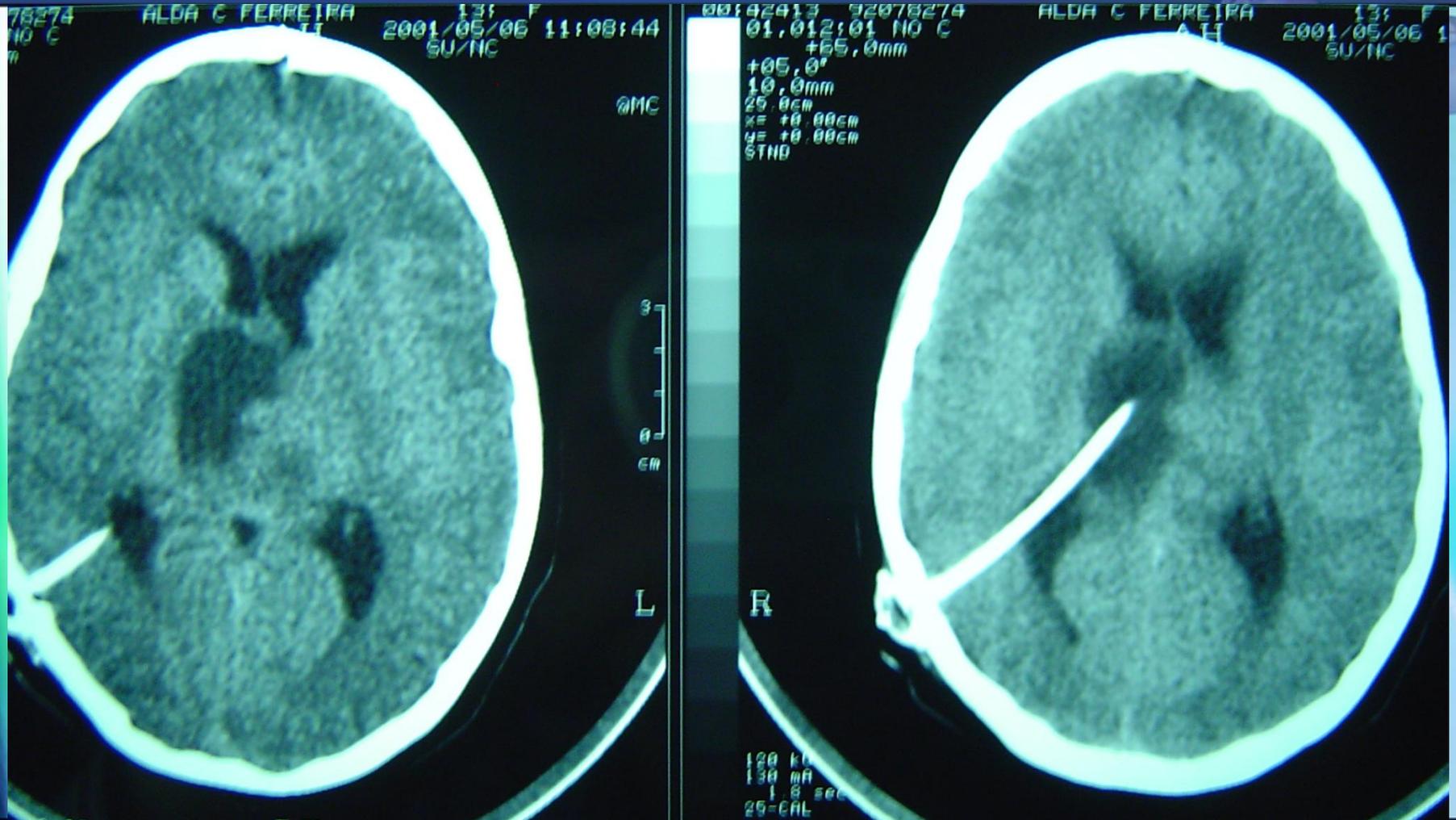
♀, 12 a, ependimoma (10,5 meses)



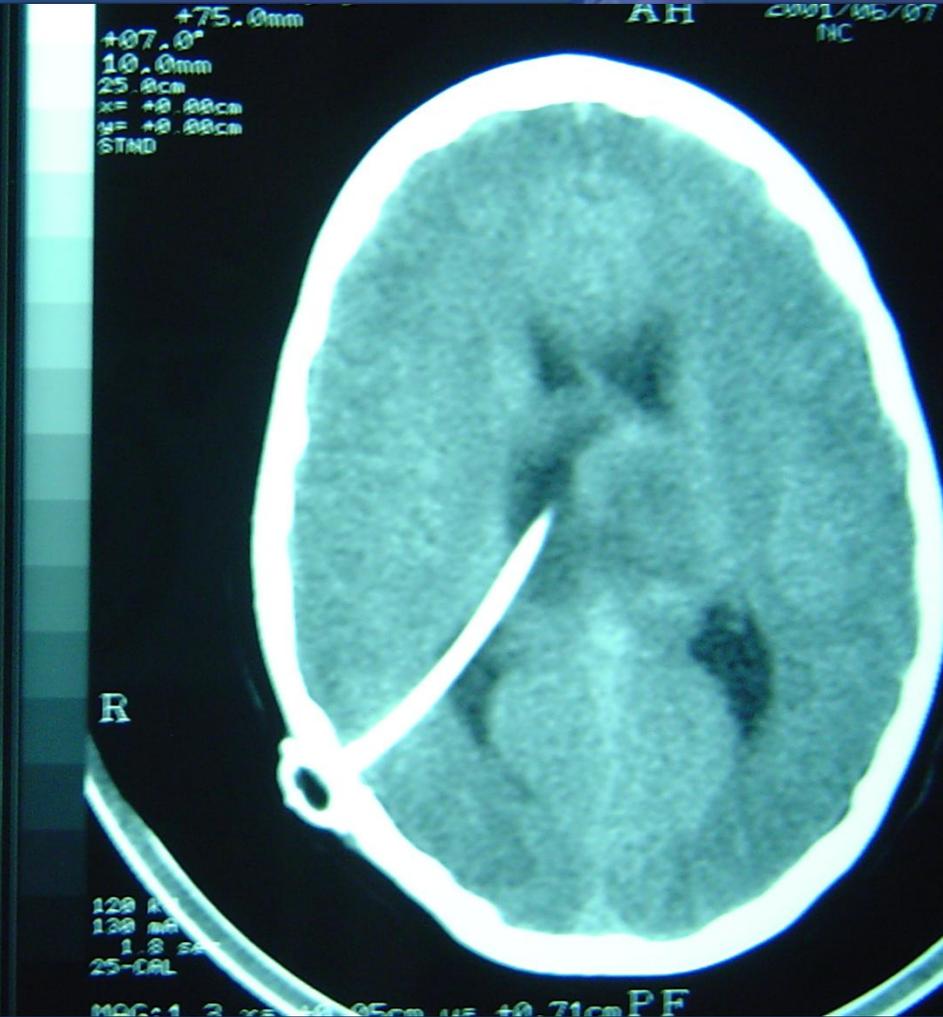
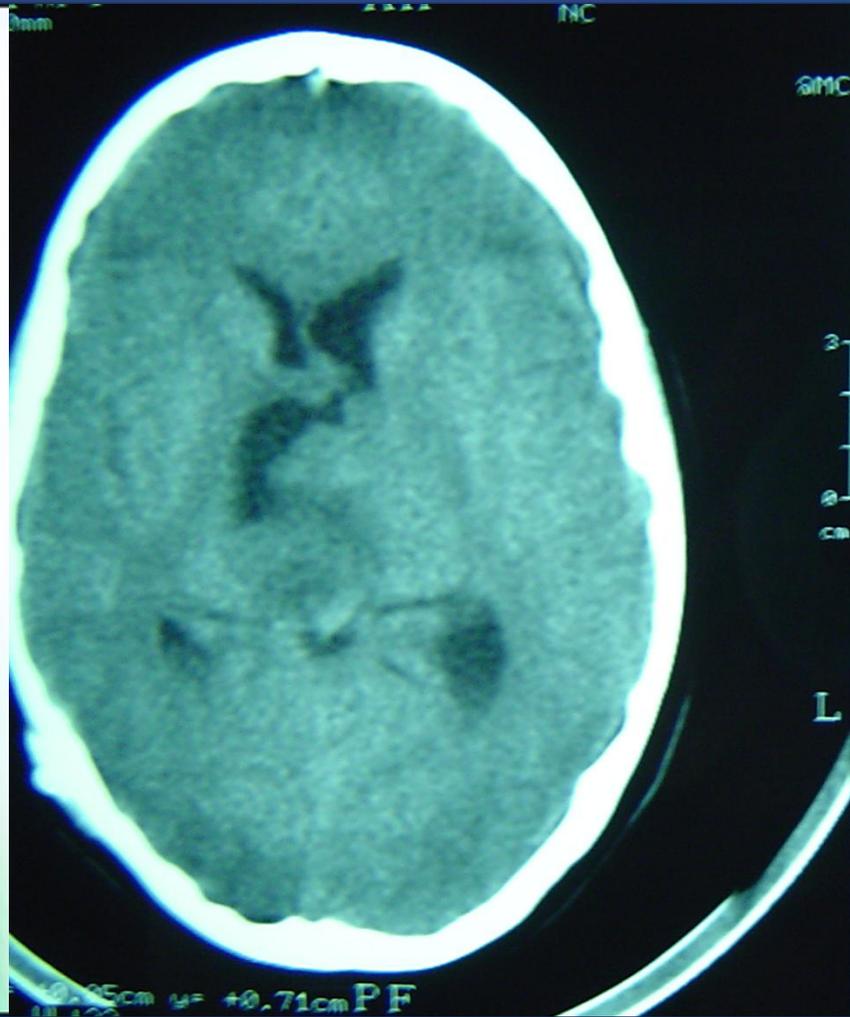
♀, 12 a, ependimoma (10,5 meses)



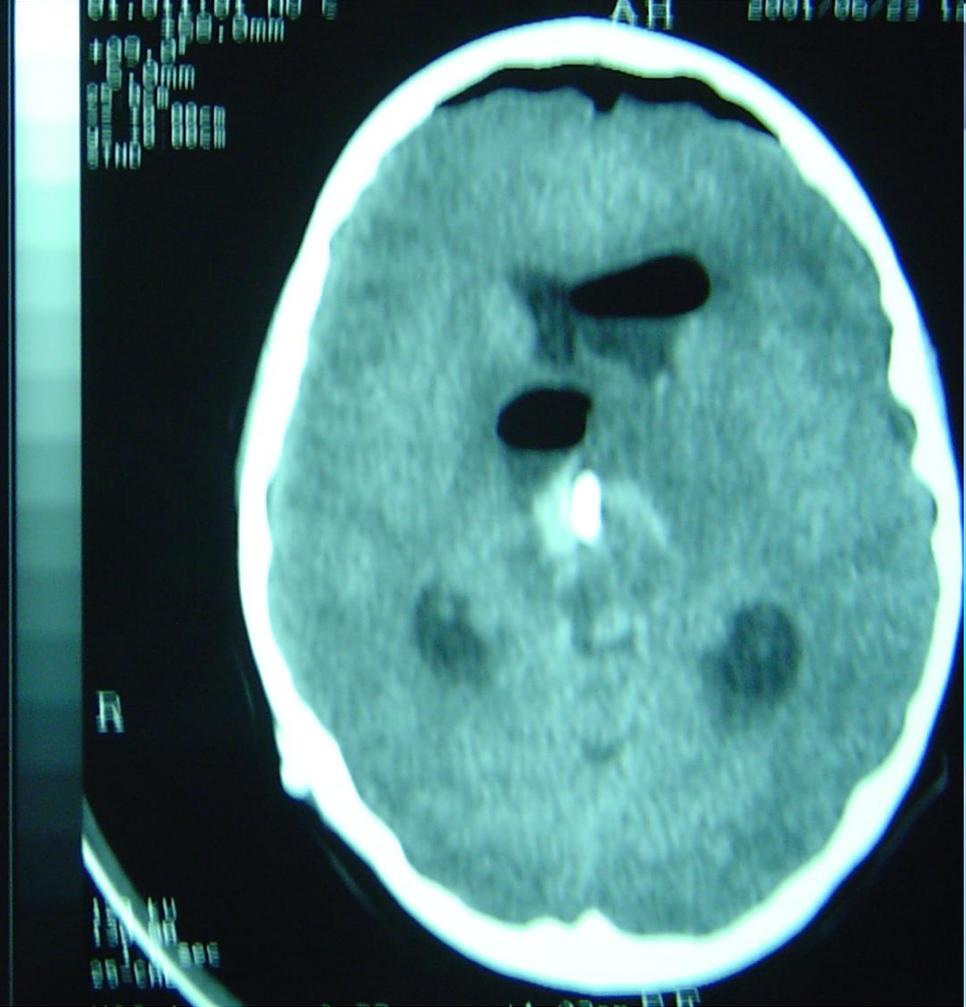
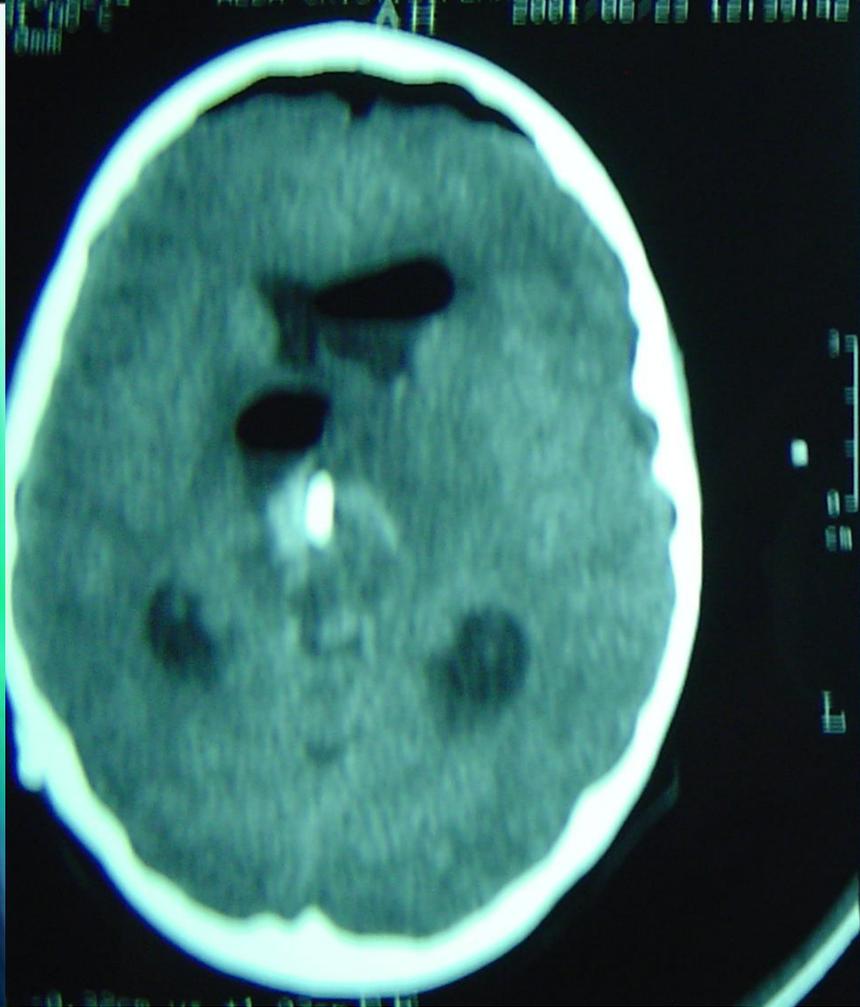
♀, 12 a, ependimoma (10,5 meses)



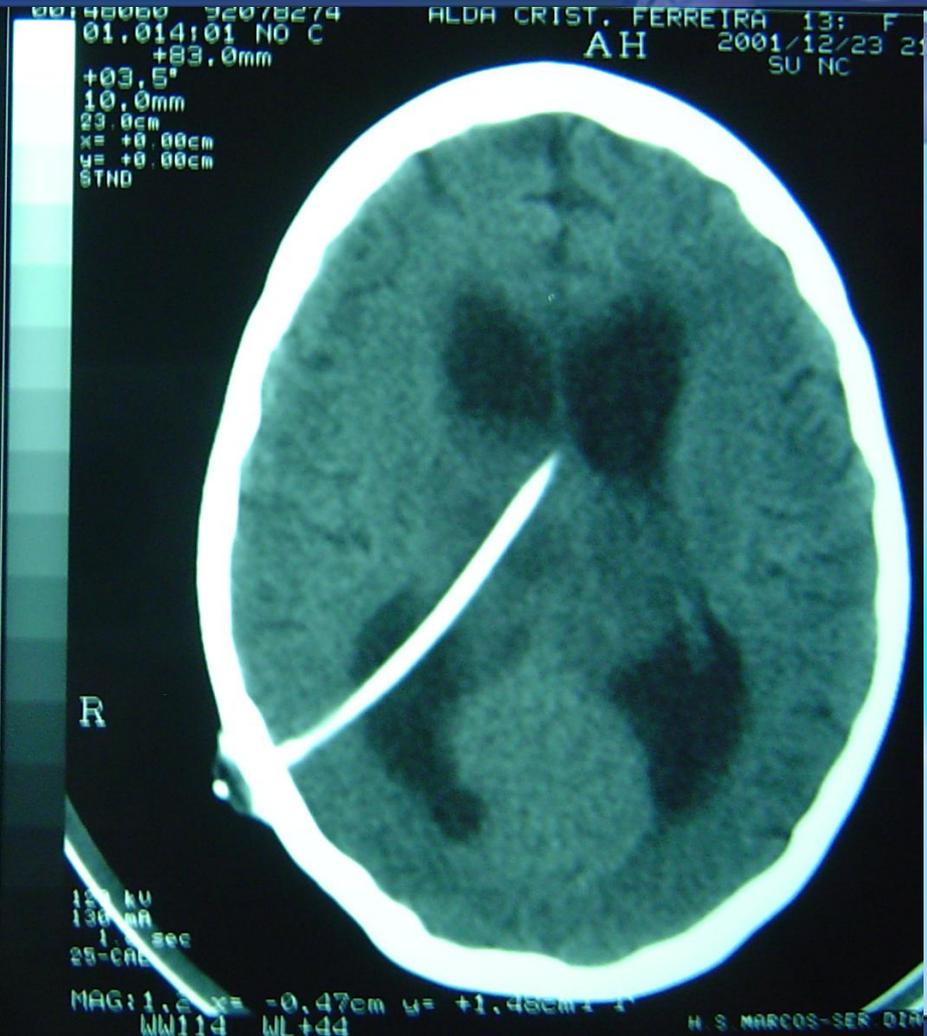
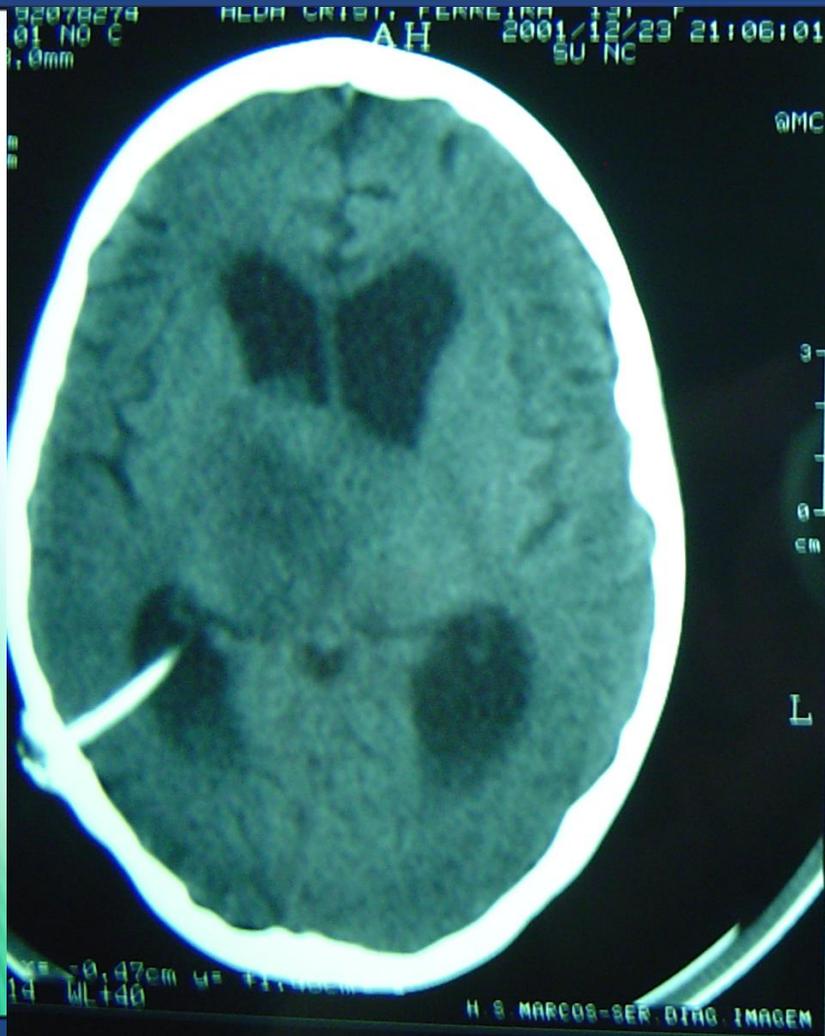
♀, 12 a, ependimoma (10,5 meses)



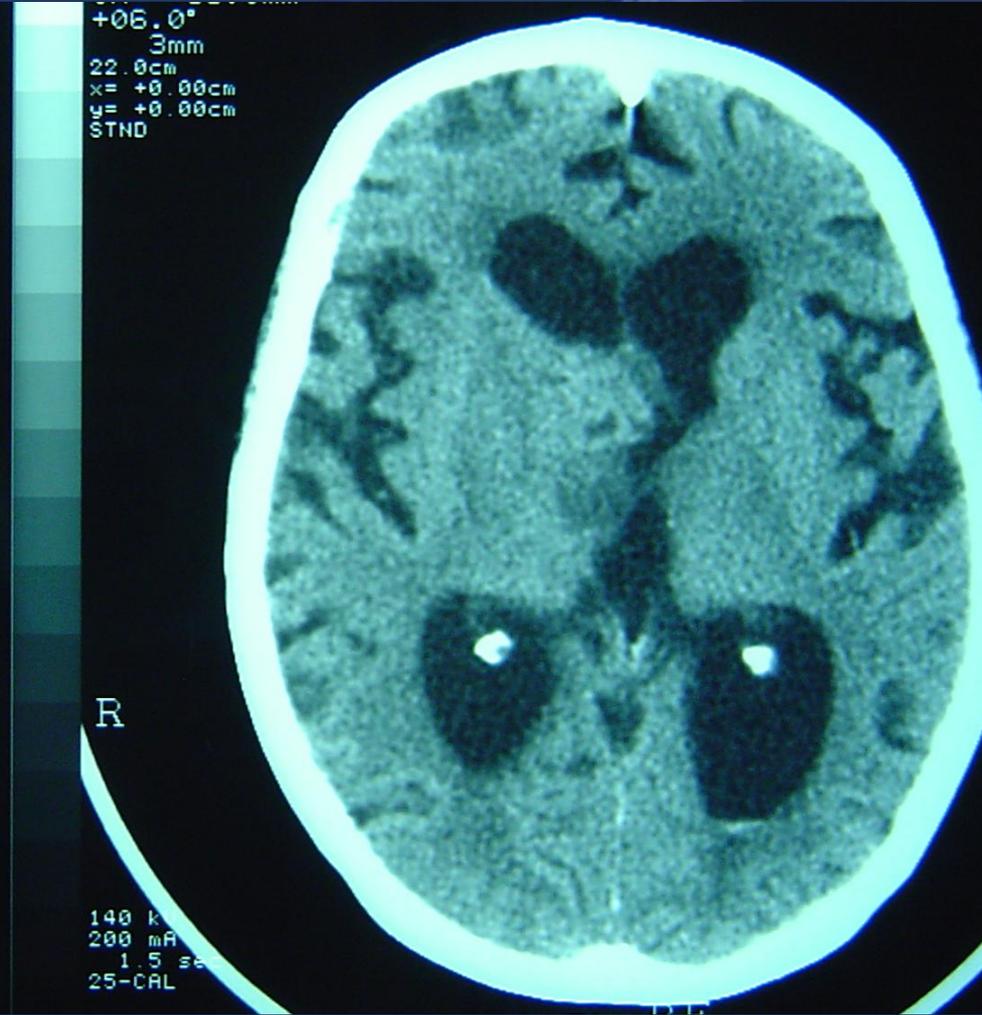
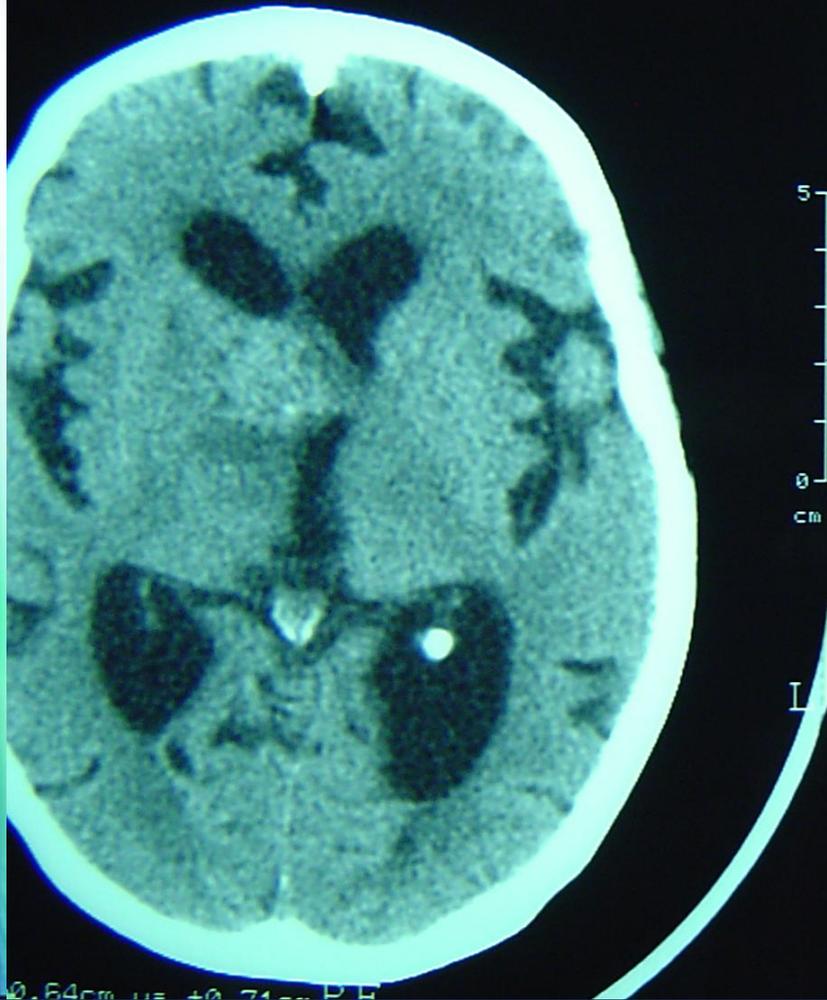
♀, 12 a, ependimoma (10,5 meses)



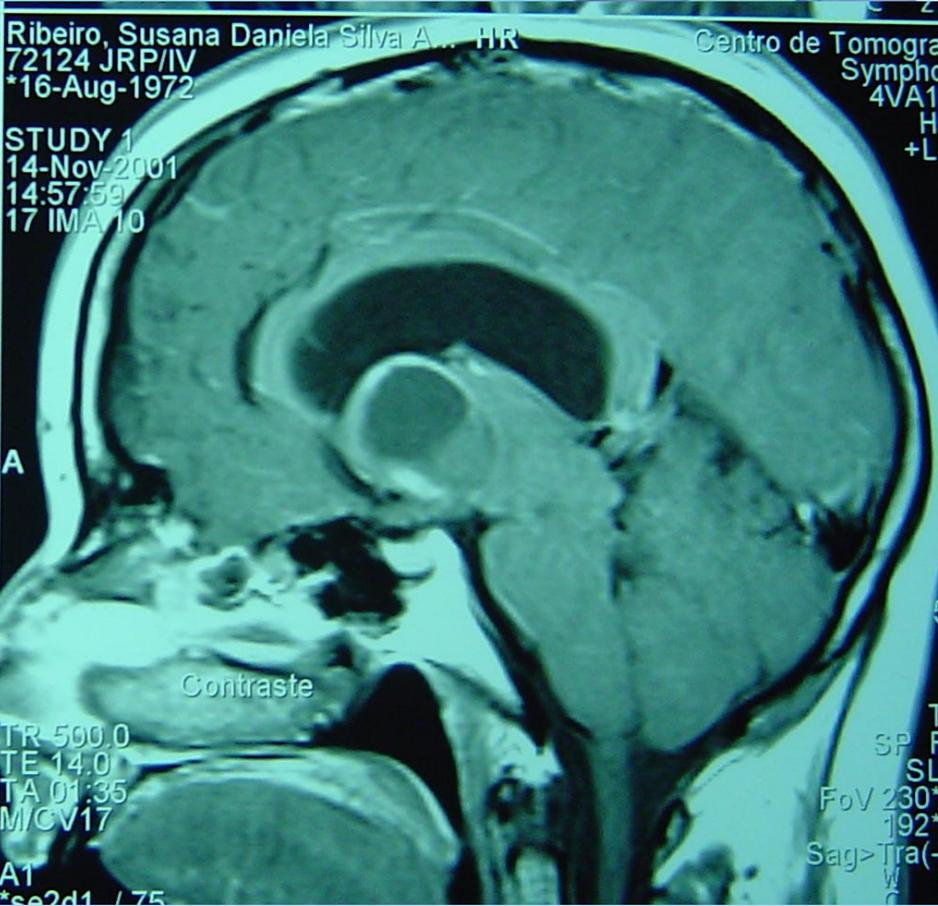
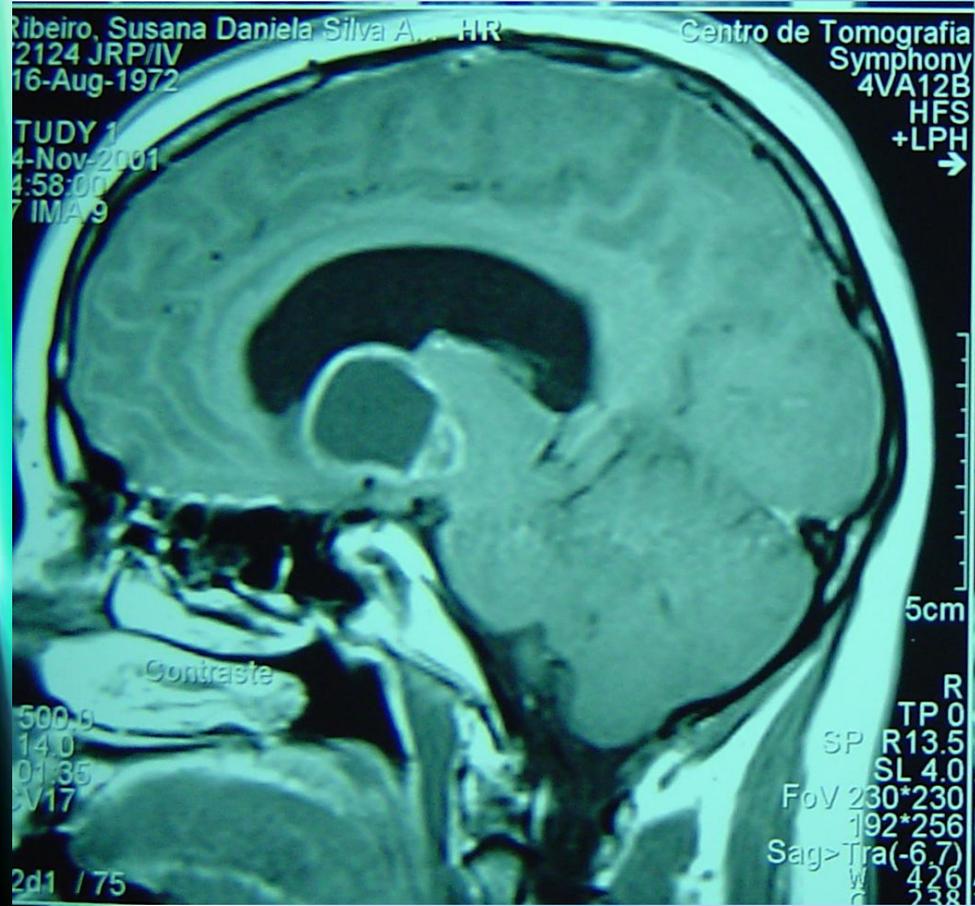
♀, 12 a, ependimoma (10,5 meses)



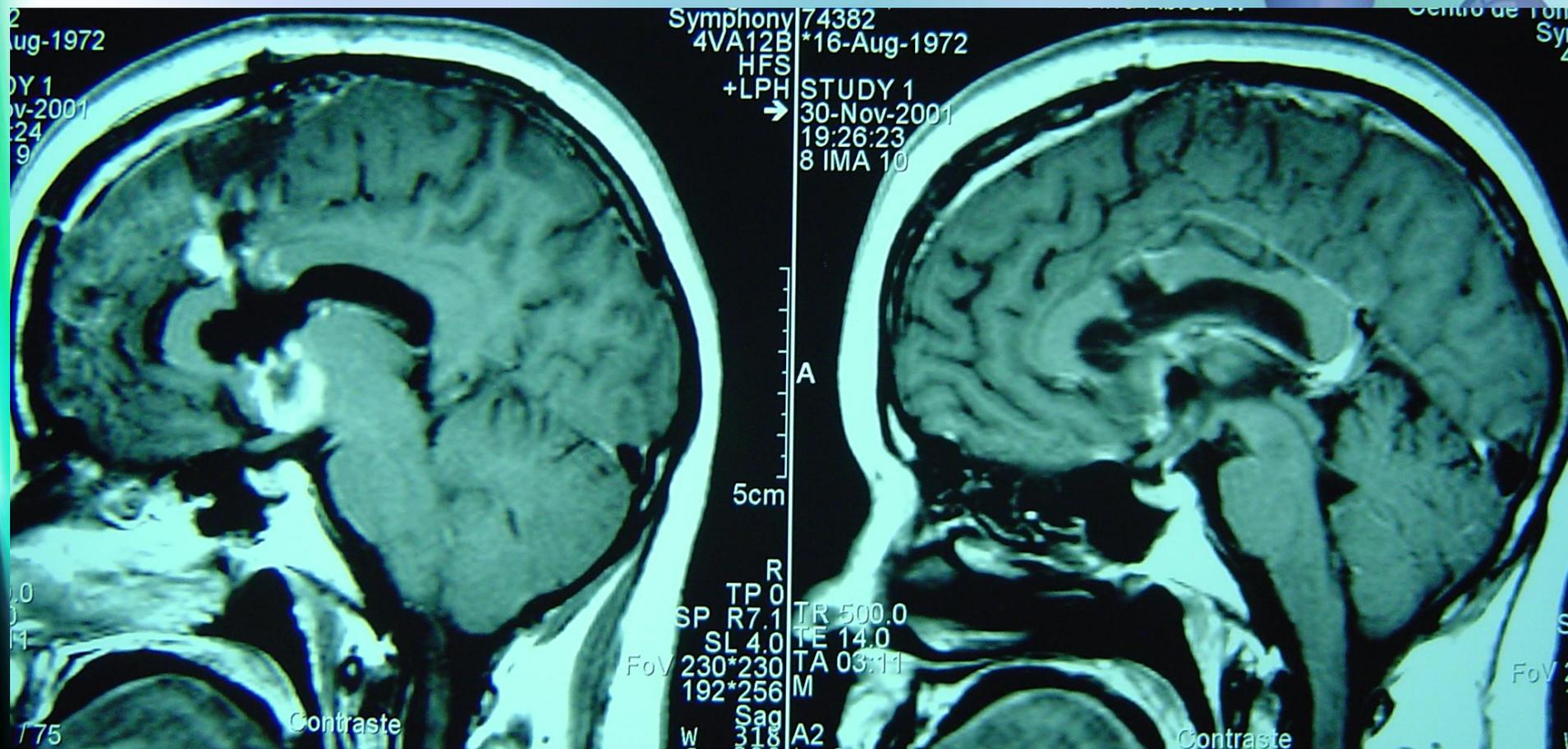
# ♀, 29a, glioblastoma (12,5 meses)



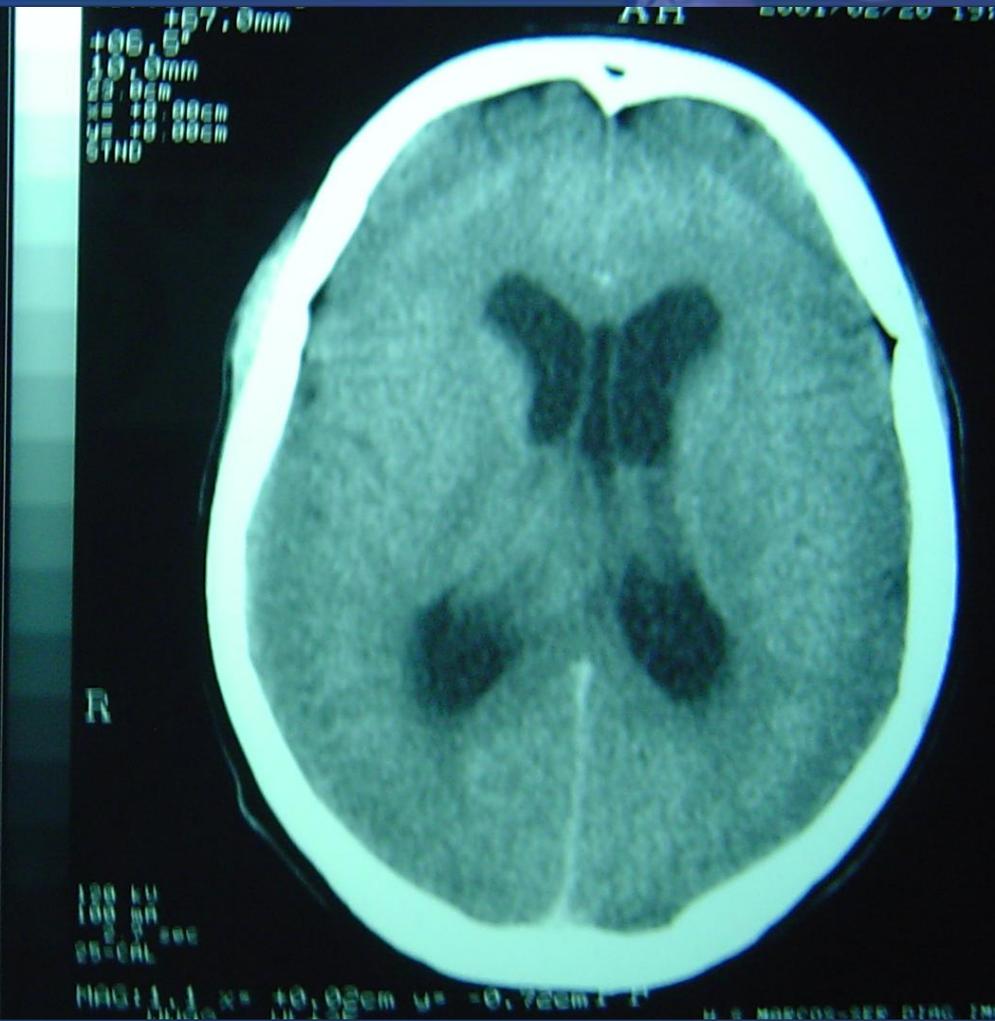
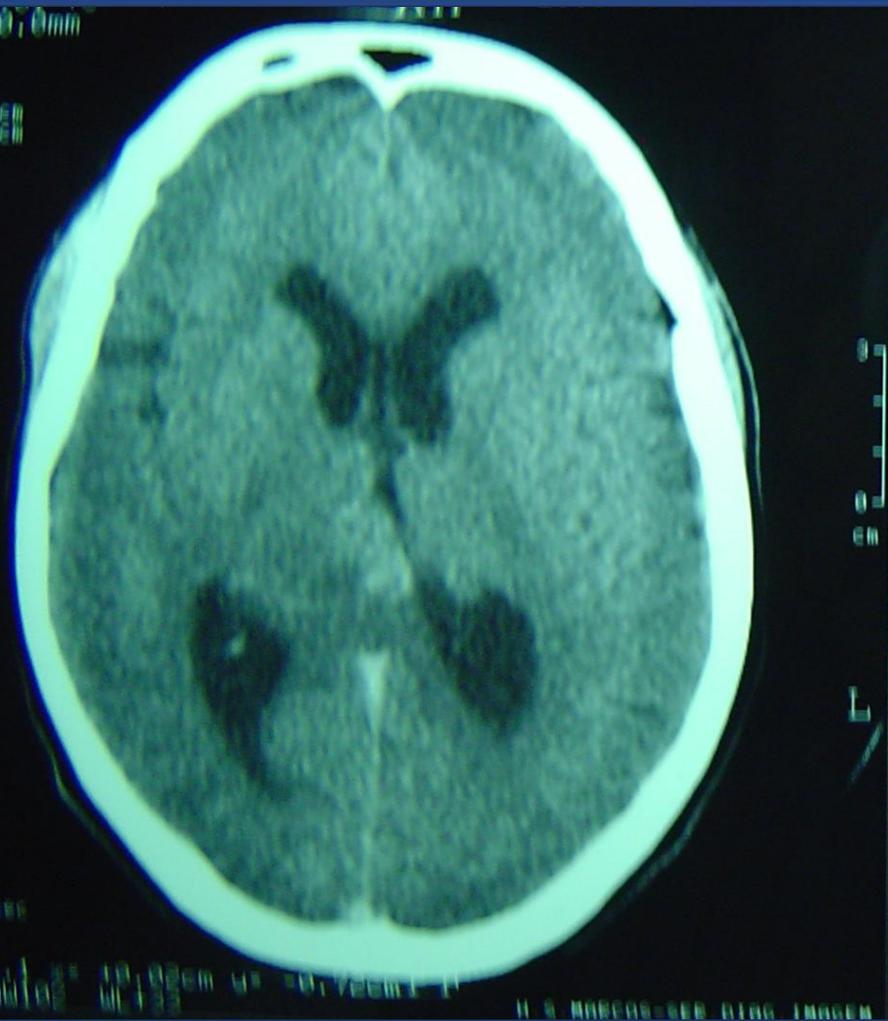
# ♀, 29a, glioblastoma (12,5 meses)



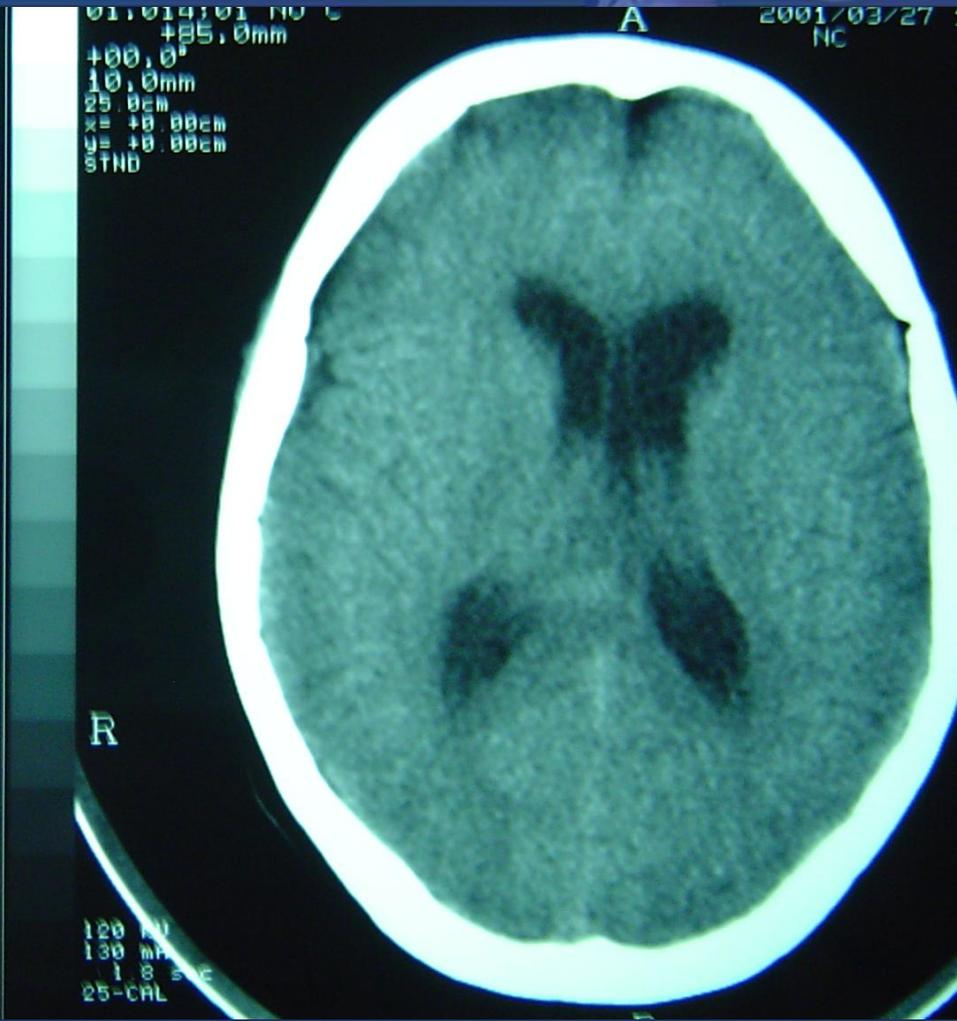
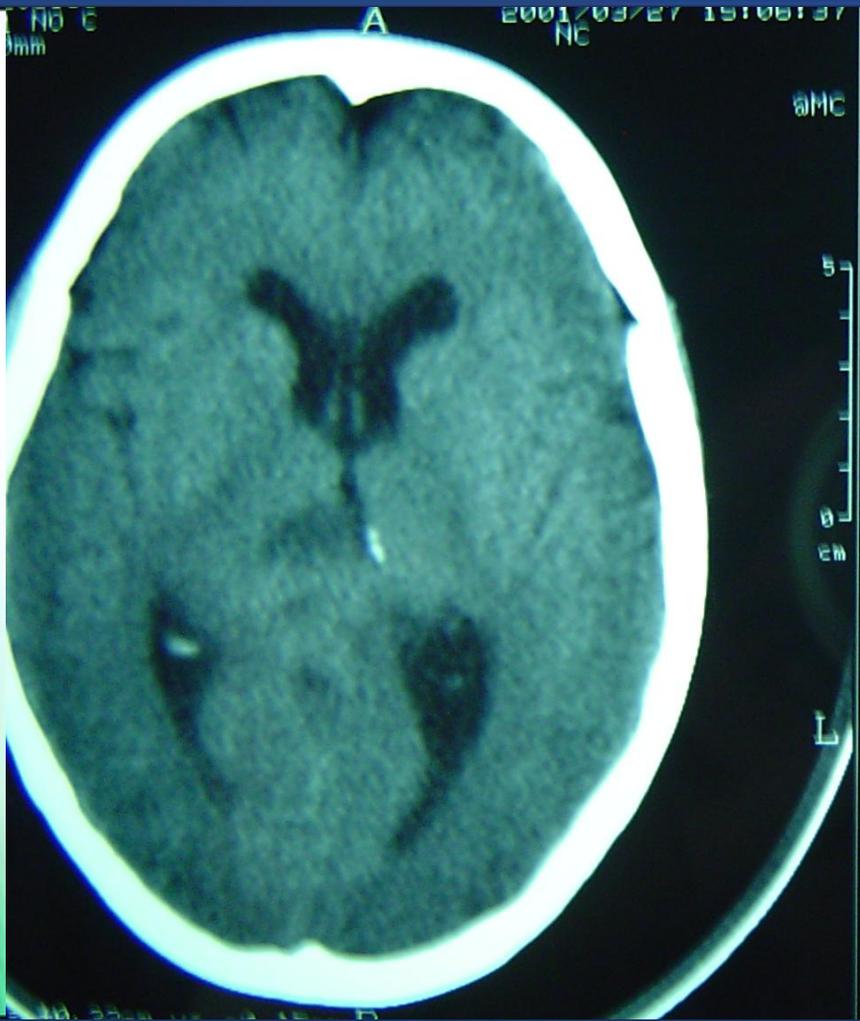
# ♀, 29a, glioblastoma (12,5 meses)



♀, 38a, glioblastoma (12,5 meses)



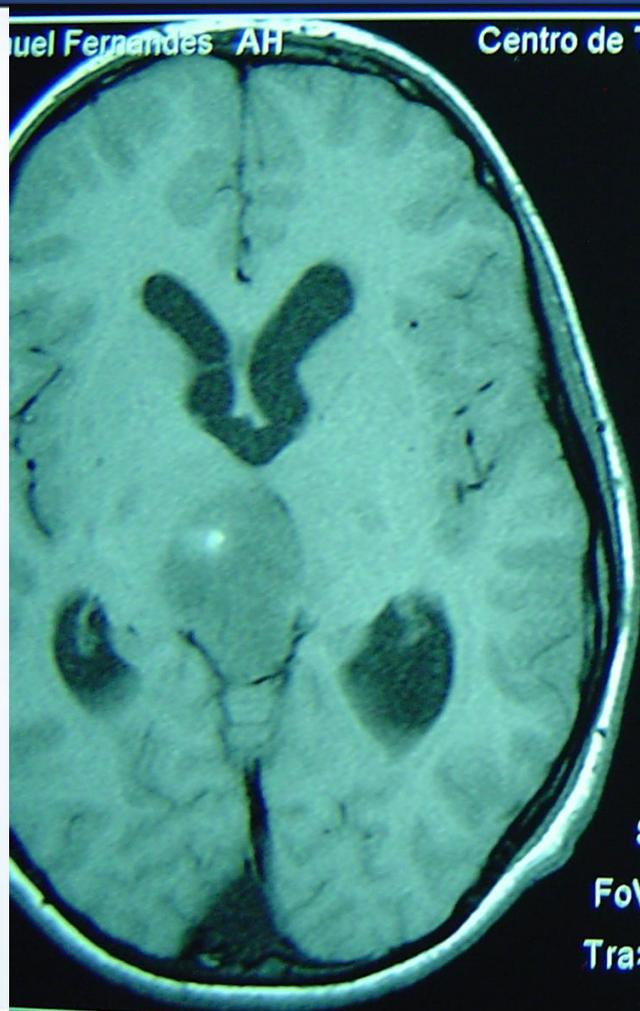
♀, 38a, glioblastoma (12,5 meses)



♀, 38a, glioblastoma (12,5 meses). Mtx L2-L3



♂, 15 anos, glioblastoma (16 meses)



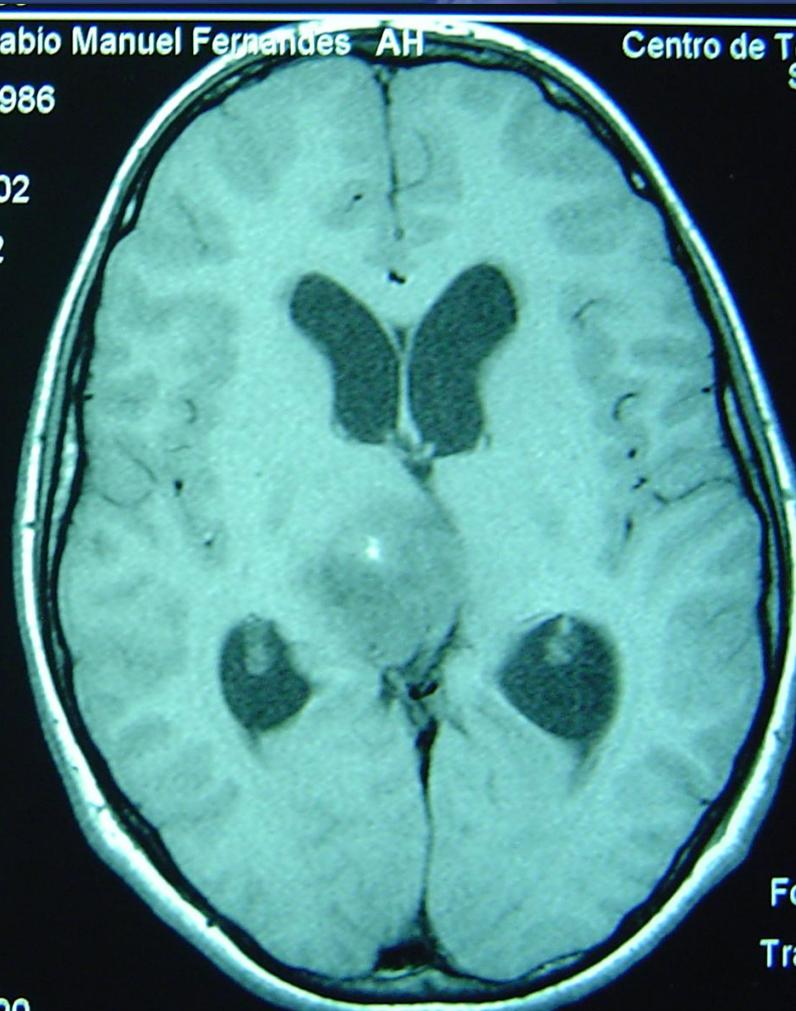
Gomes, Fabio Manuel Fernandes AH   
106507   
\*13-Oct-1986

STUDY 1   
19-Jul-2002   
19:37:19   
10 IMA 12

5cm

R

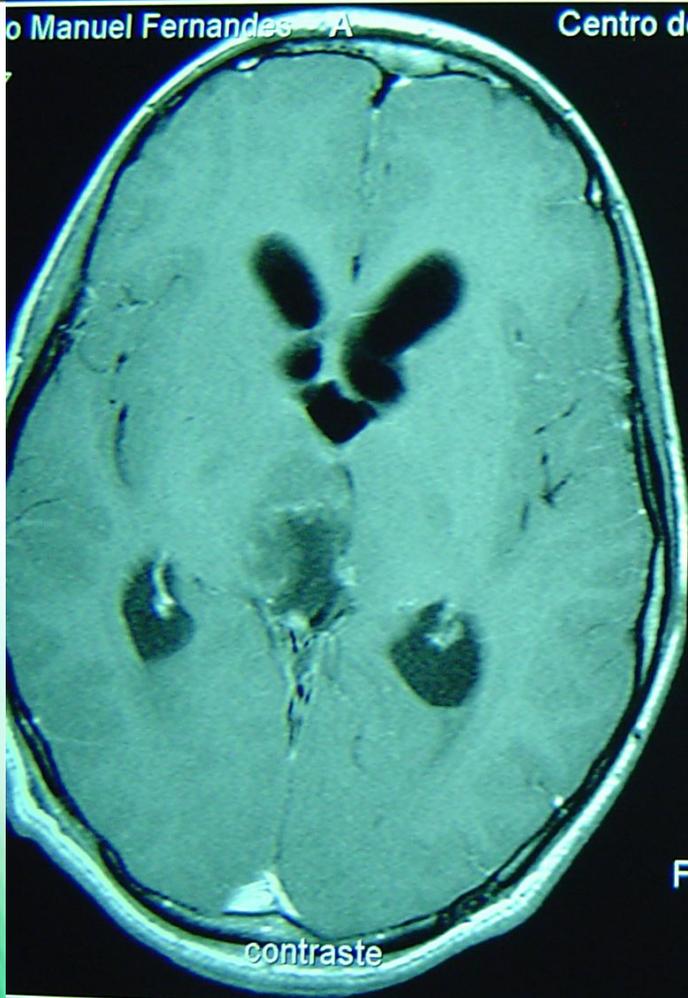
R   
TP 0   
SP H40.4 TR 500.0   
SL 5.0 TE 14.0   
FoV 172\*230 TA 03:49   
230\*512s M   
Tra>Cor(-2.2) A2   
W 530 \*se2d1 / 90   
C 267



Centro de T

FO   
Tr

# ♂, 15 anos, glioblastoma (16 meses)



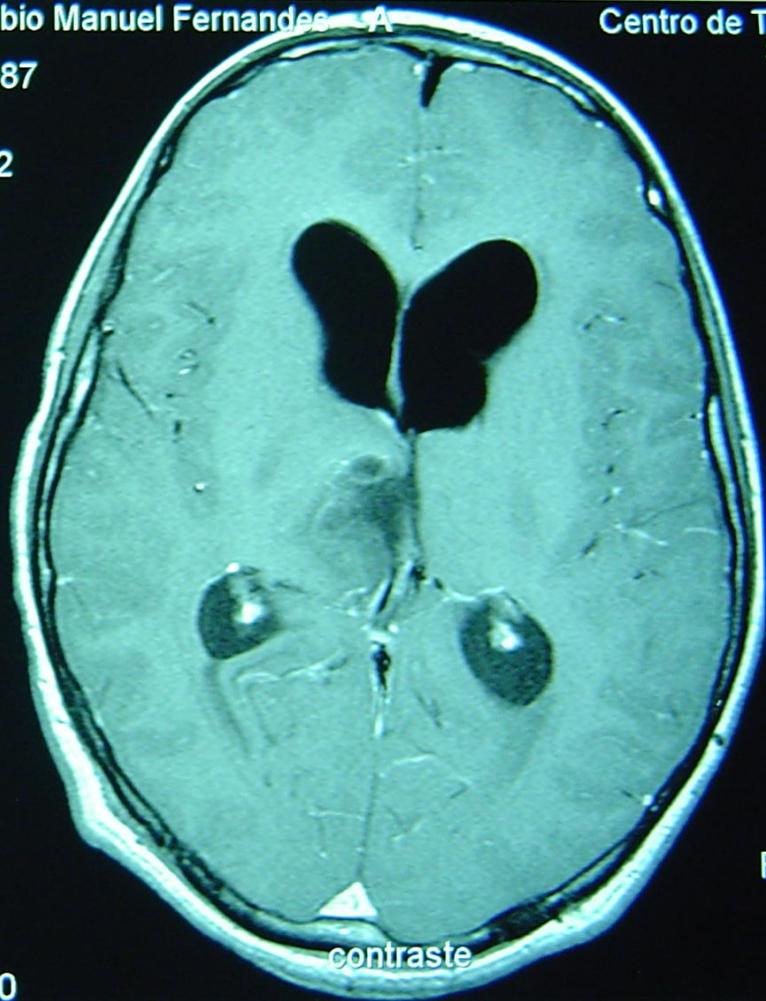
Centro de Tomografia Gomes, Fabio Manuel Fernandes - A

Symphony 107303  
4VA15A \*13-Oct-1987  
HFS  
+LPH  
STUDY 1  
→ 26-Jul-2002  
17:03:28  
11 IMA 12

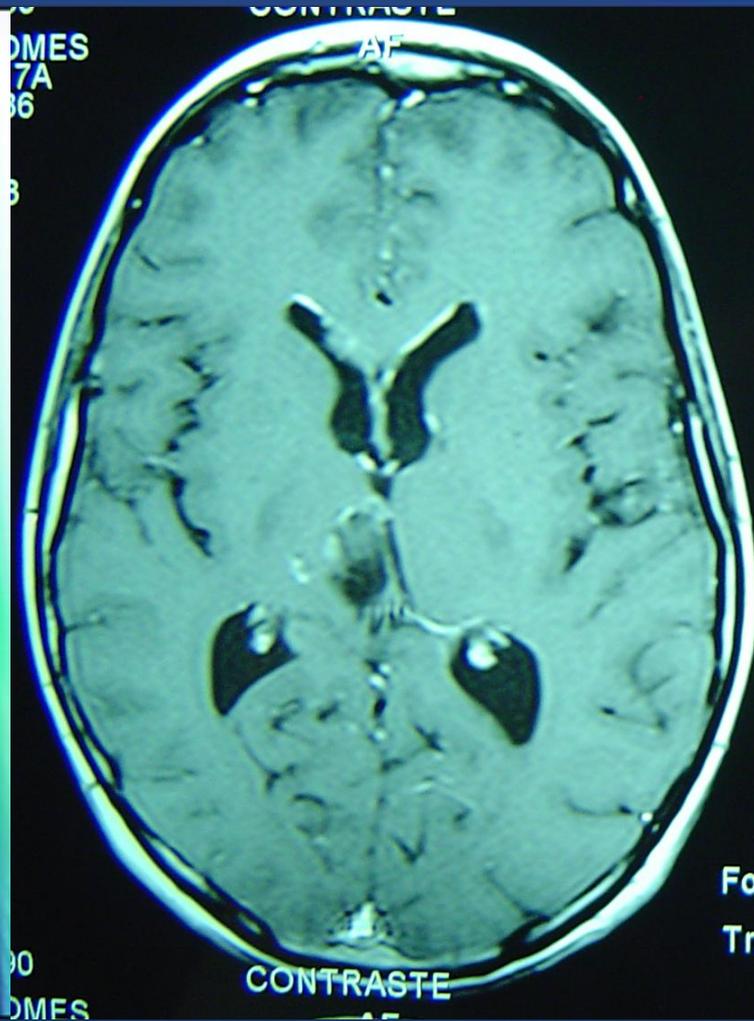
Centro de T

R  
5cm

R  
TP 0  
SP H23.1 TR 500.0  
SL 5.0 TE 14.0  
FoV 158\*230 TA 03:30  
211\*512s M  
Tra  
W 658 A2  
C 357 \*se2d1 / 90



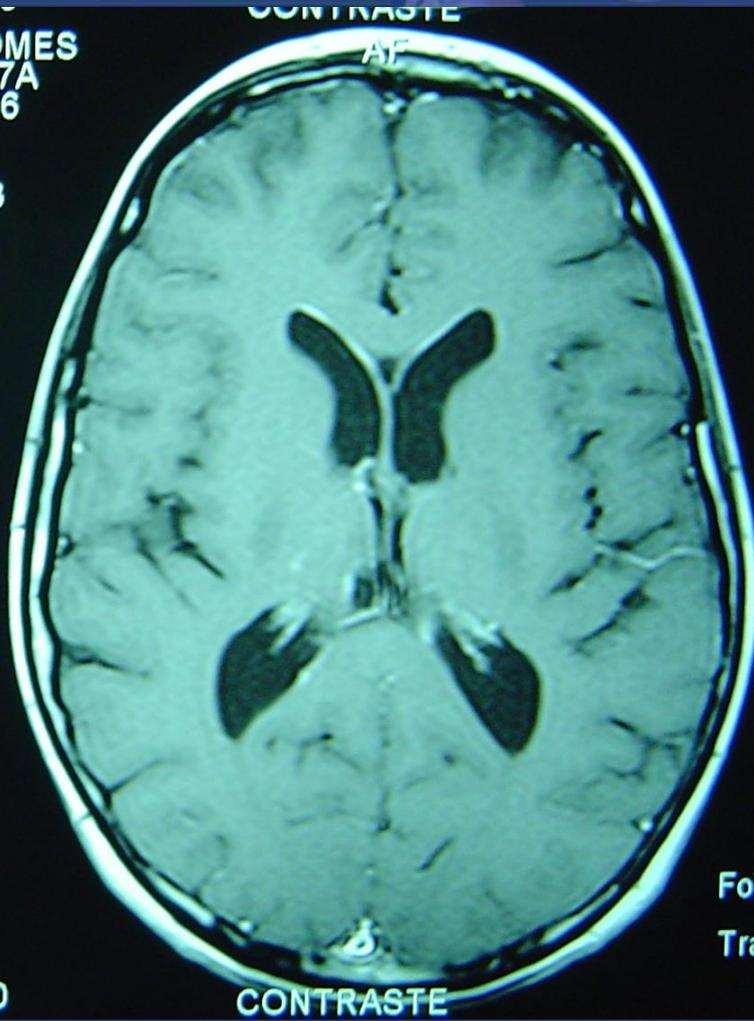
♂, 15 anos, glioblastoma (16 meses). Carcinomatose meníngea



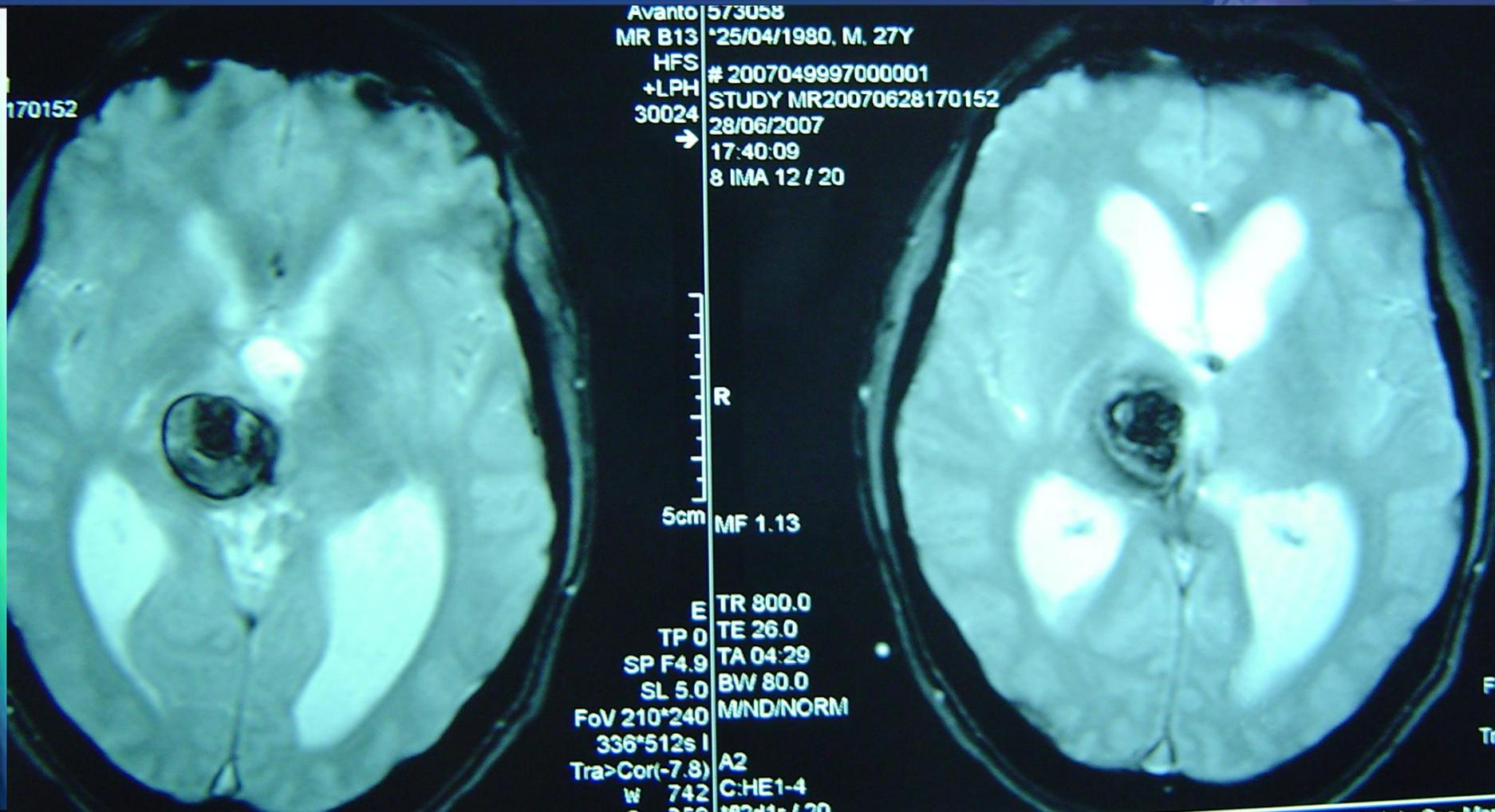
FABIO GOMES  
Symphony 131086 17A  
4VA15A \*13/10/1986  
HFS  
+LPH  
STUDY 2  
→ 24/11/2003  
14:53:02  
8 IMA 14

R  
5cm

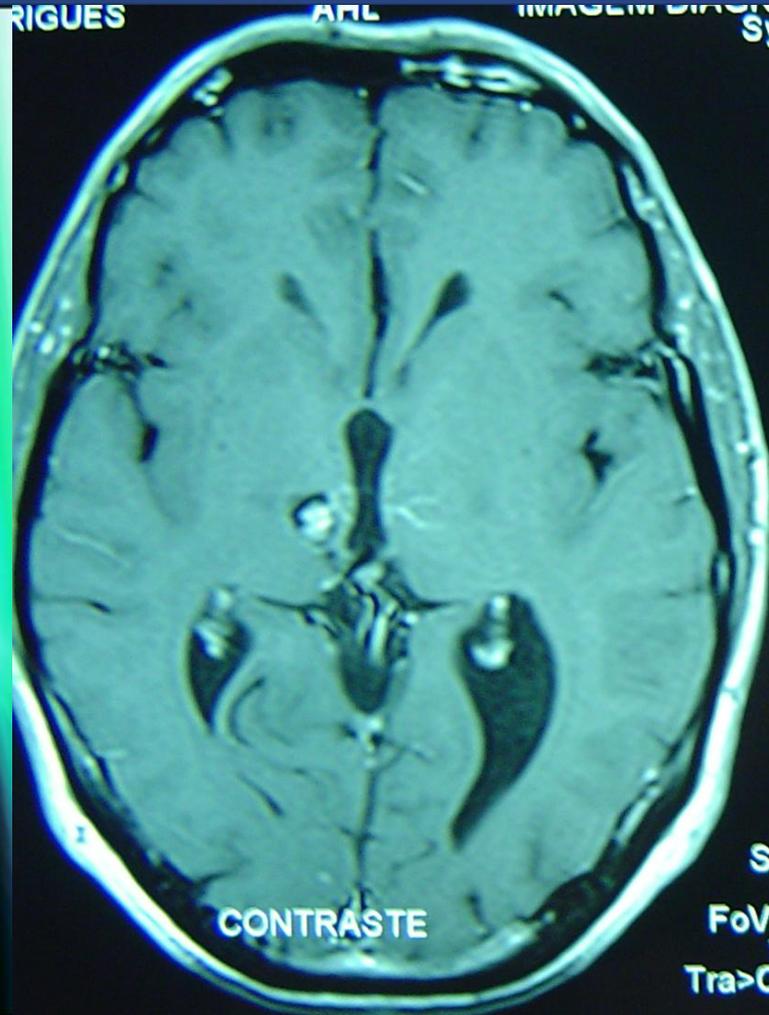
I/R  
TP 0  
SP H19.9 TR 459.0  
SL 4.0 TE 15.0  
FoV 186\*230 TA 03:34  
156\*256s M/CV19  
Tra>Cor(5.8)  
W 584 A3  
C 344 \*se2d1 / 90



# ♂, 27a, angioma cavernoso



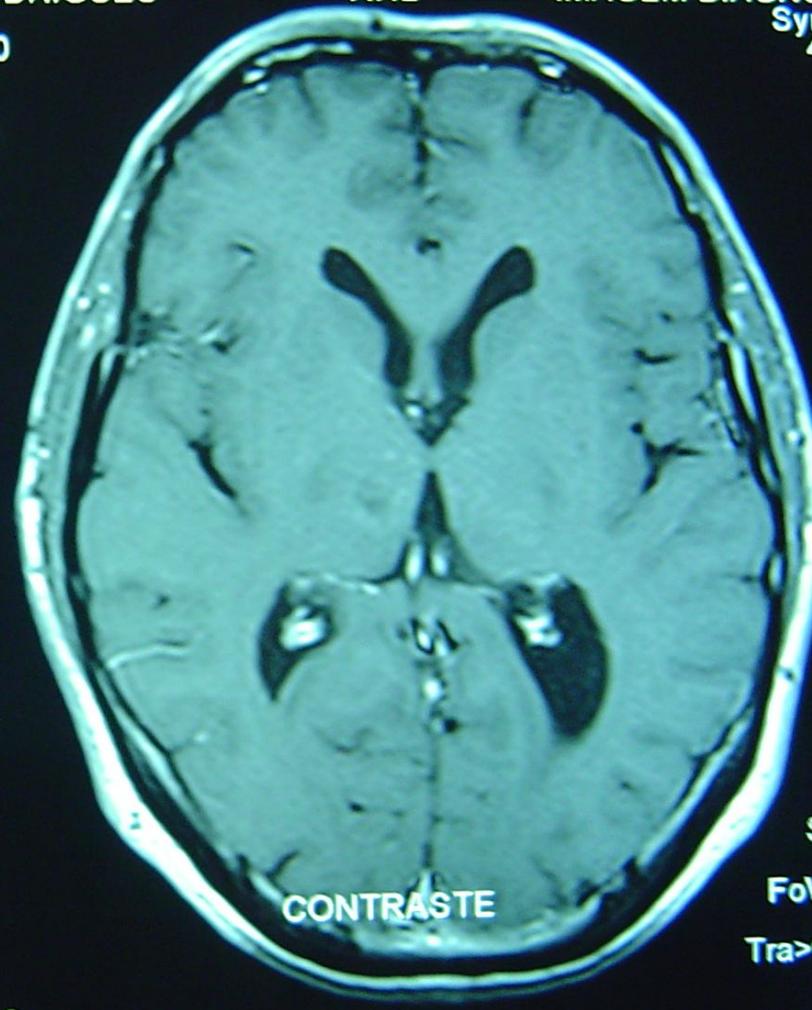
# ♂, 27a, angioma cavernoso



Symphony 250480  
4/A/15A \*25/04/1980  
HFS  
+LPH STUDY 1  
18/04/2008  
14:06:51  
20 IMA 11

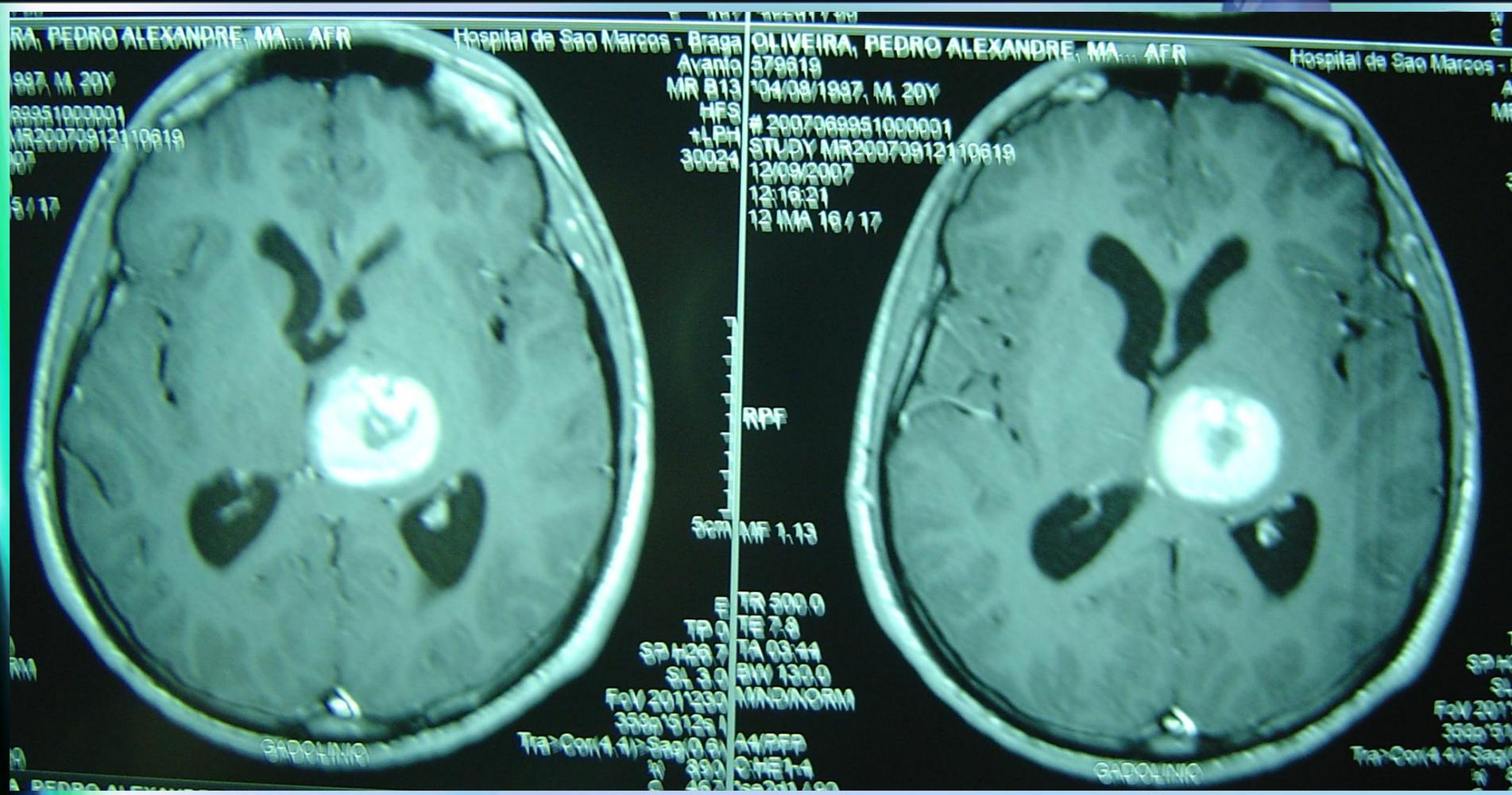
RAH

10cm  
I/R  
TP 0  
SP H22.5 TR 459.0  
SL 3.0 TE 15.0  
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168\*256s M/CV19  
Tra>Cor(-11,3)  
W 794 A3

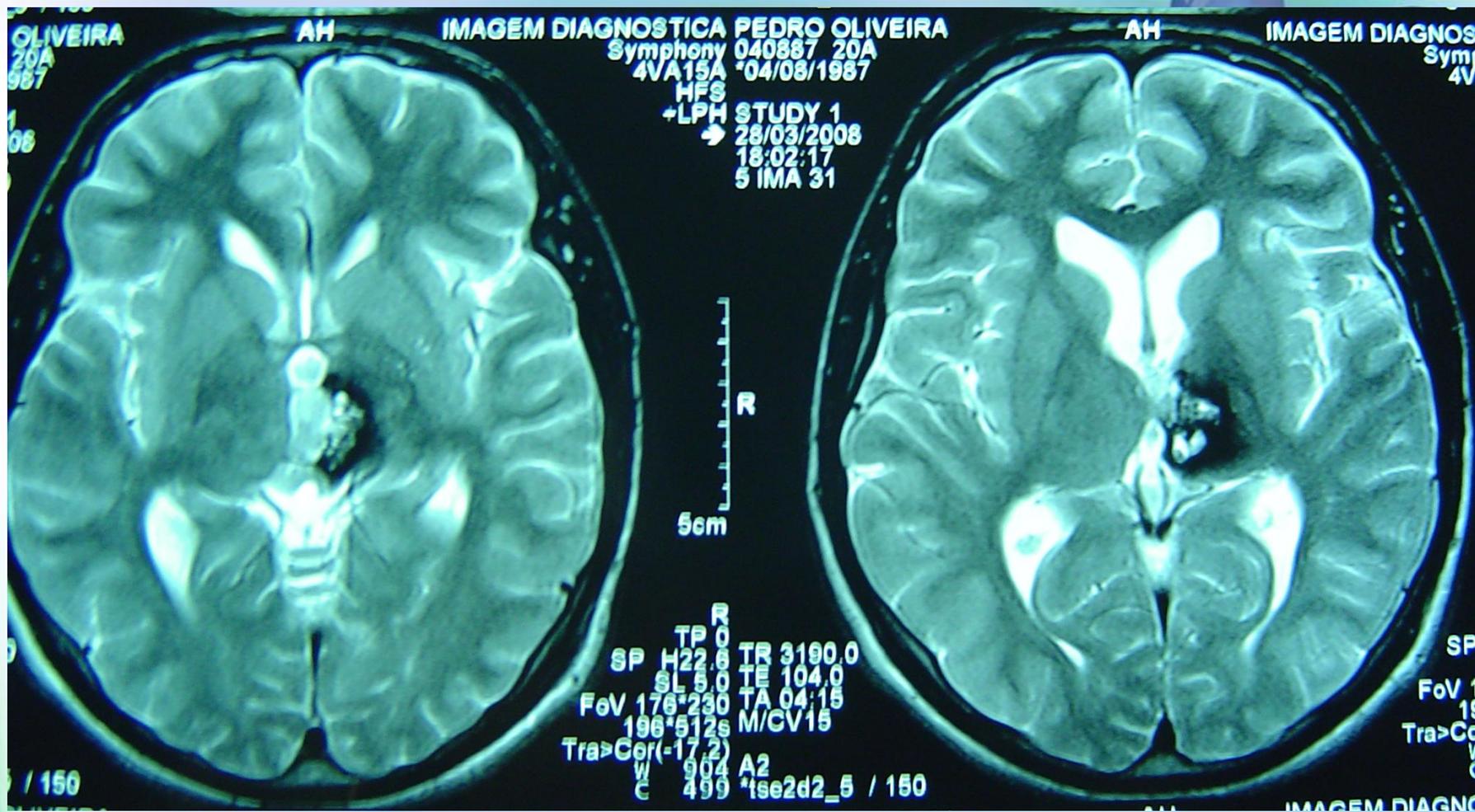


FoV  
Tra>

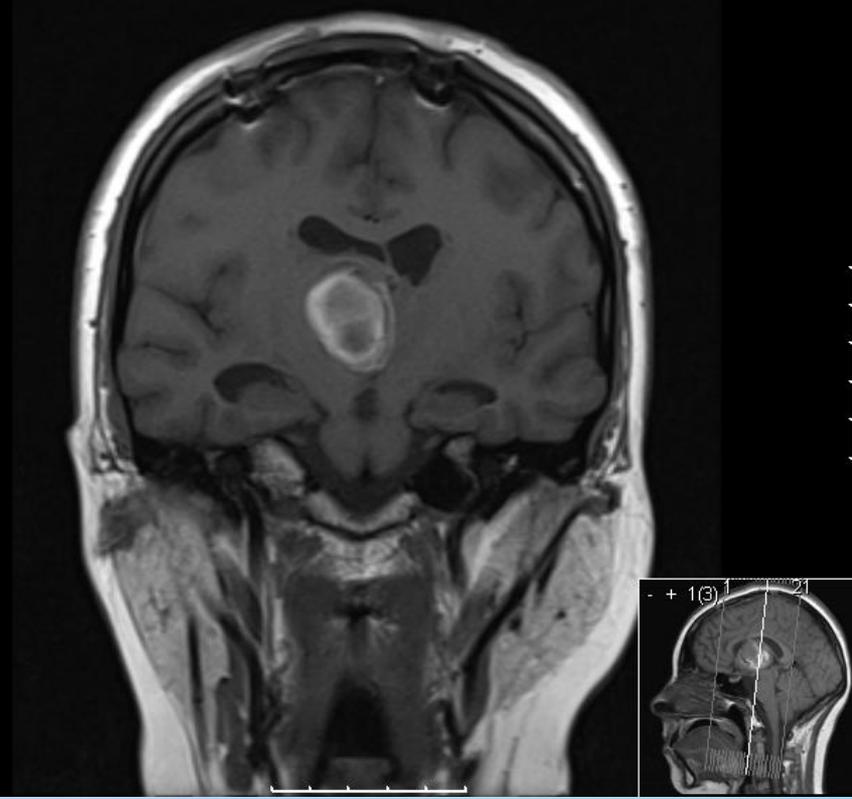
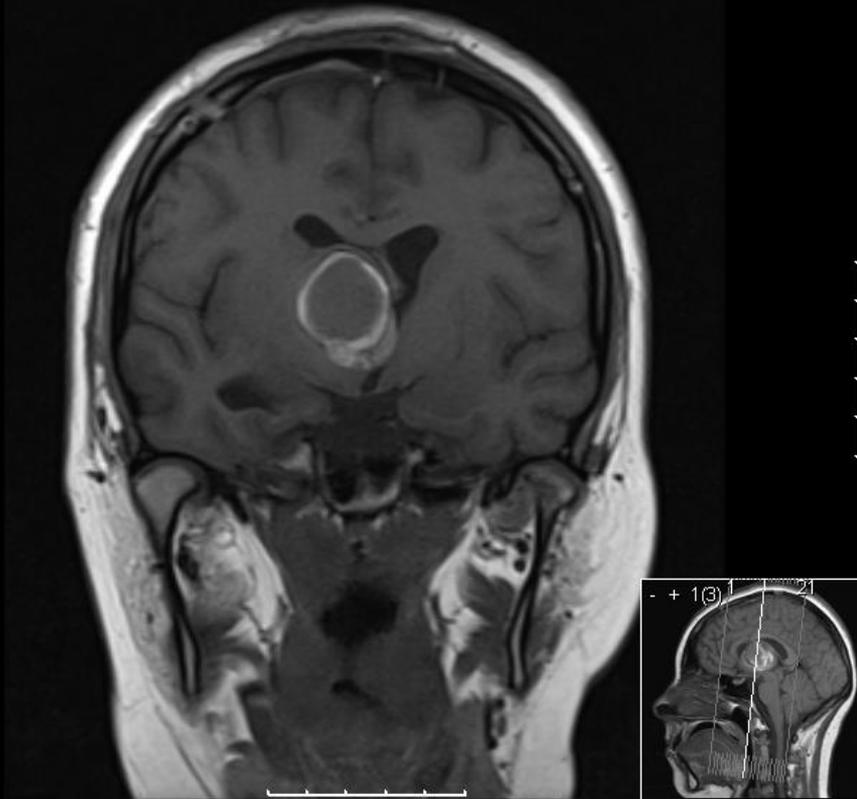
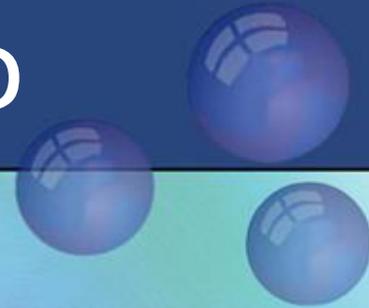
# ♂, 20 a, angioma cavernoso



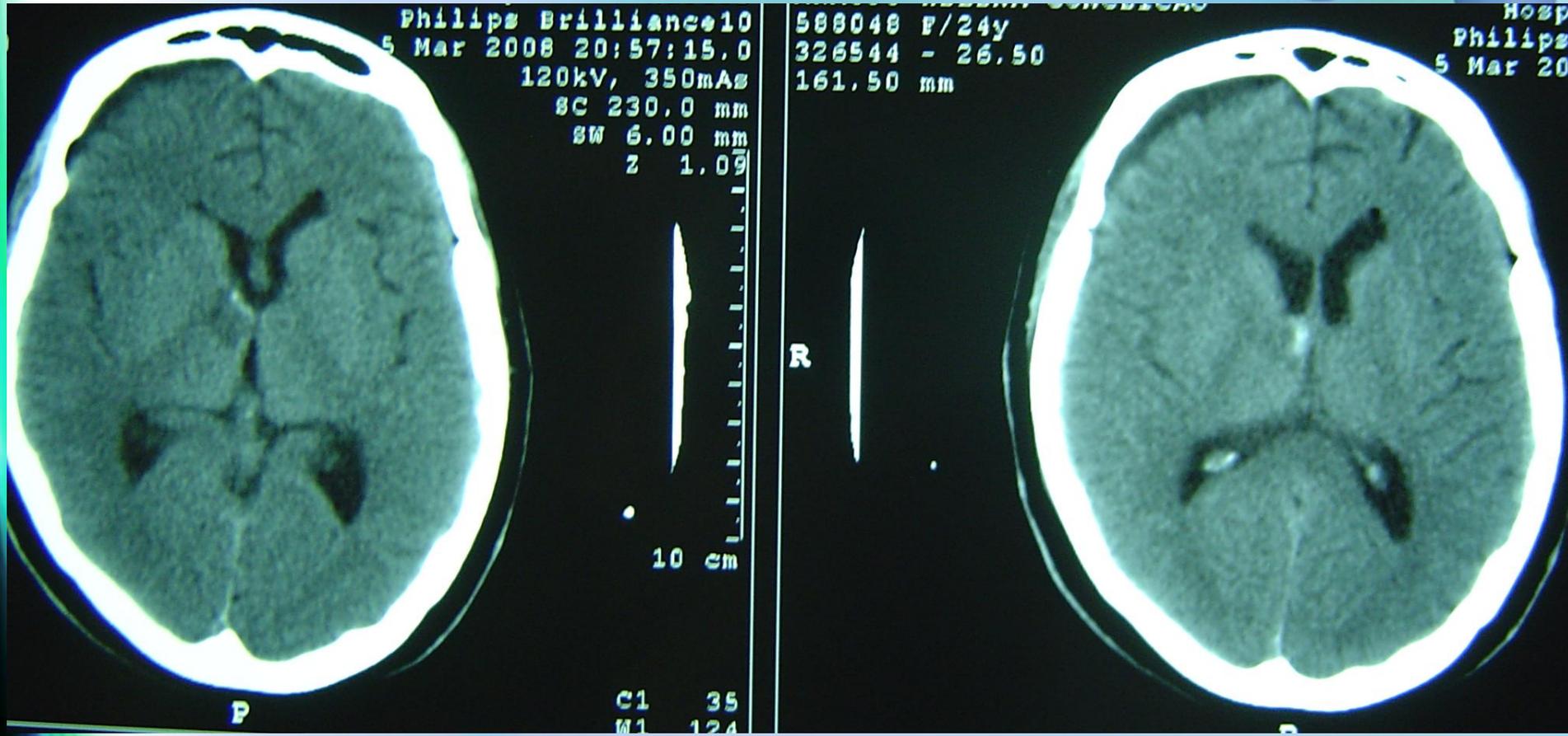
# ♂, 20 a, angioma cavernoso



# ♀, 24a, angioma cavernoso



# ♀, 24a, angioma cavernoso



# Conclusões

- Tumores malignos
  - adultos: 7,3 meses
  - crianças: 13,8 (GBM + ependimoma)
- Cirurgia lesões malignas não-difusas
- Melhoria/sem alterações 57% pós-op imediato (54%)
  - boa evolução tardia
- Sem mortalidade pós-op
- Morbilidade
- Glioblastoma (N= 6; 9,4 meses)
- Sobrevida 9,1 meses (27,6 meses)
- > sobrevida craniotomia vs BSTX
- > sobrevida ressecção total (N= 2)
- Escolha abordagem

# Conclusões

- Deterioração neurológica, sangramento recorrente, hidrocefalia
- NL intactos *follow-up* tardio
- Ressangramento após 1 mês
- Taxa hemorragia anual 2,9% (Kondziolka et al), >, ressecções parciais
- Malformações imagiológica/ ocultas

