

**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" - 15 de Maio de 2008 - 10h às 12h30 em 2008  
- Espaço dedicado aos participantes até 15 de Maio de 2008

 Sociedade Portuguesa de Neurocirurgia

Organizações Parceiras	Patrocinadores	Patrocinadores	Patrocinadores
Associação Portuguesa de Neurologia	Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia
Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia
Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia	Associação Portuguesa de Neurocirurgia

# Lesões Talâmicas

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José António Moreira da Costa

# 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

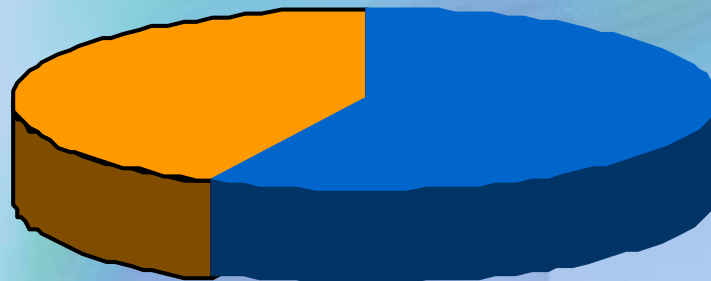


# Resultados

# Distribuição por Sexo

■ Feminino

6  
43%



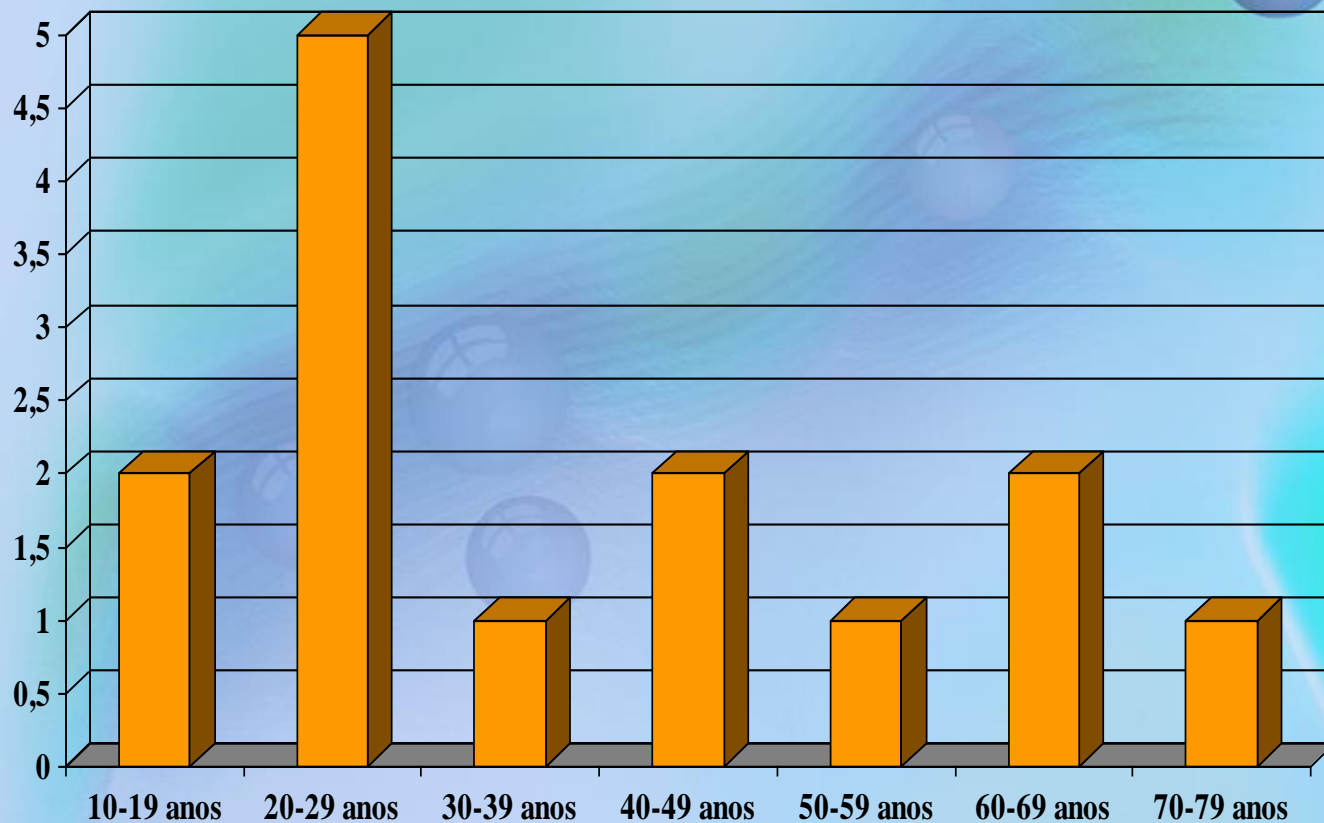
■ Masculino

8  
57%



# Distribuição Etária

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



# Sintomas de Apresentação

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



# 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%)

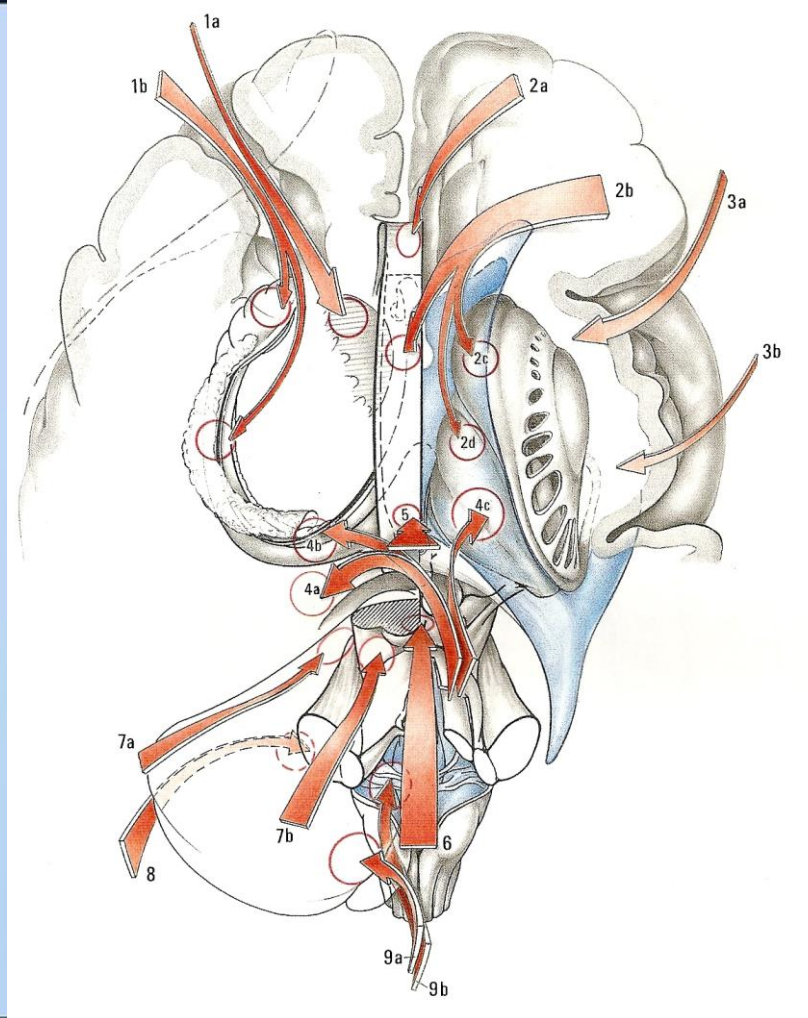
# Histologia

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

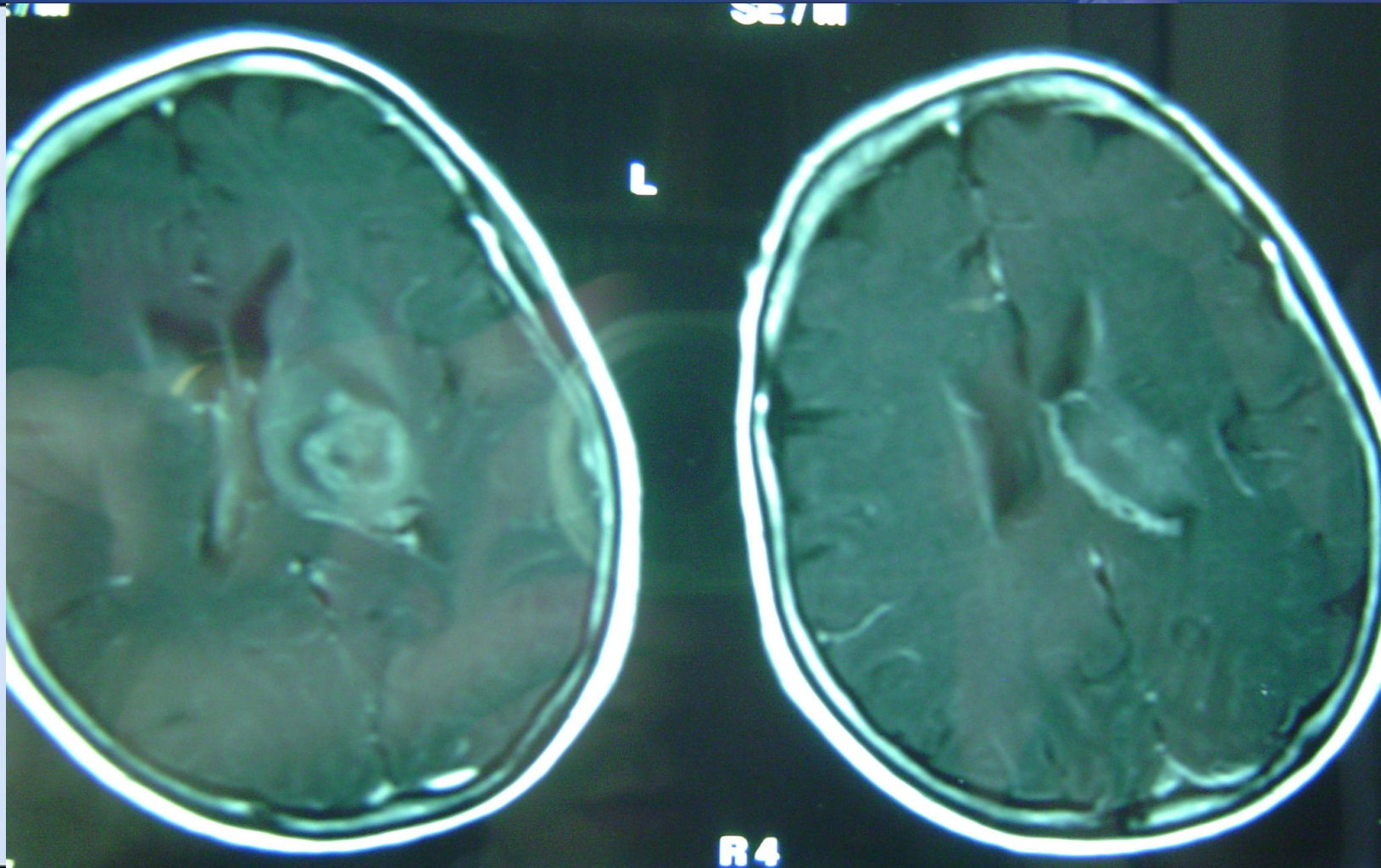
Neoplasias	N	Sobrevida média
Ressecção total	2	13,8 meses
Ressecção parcial	4	8,9 meses

# *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)

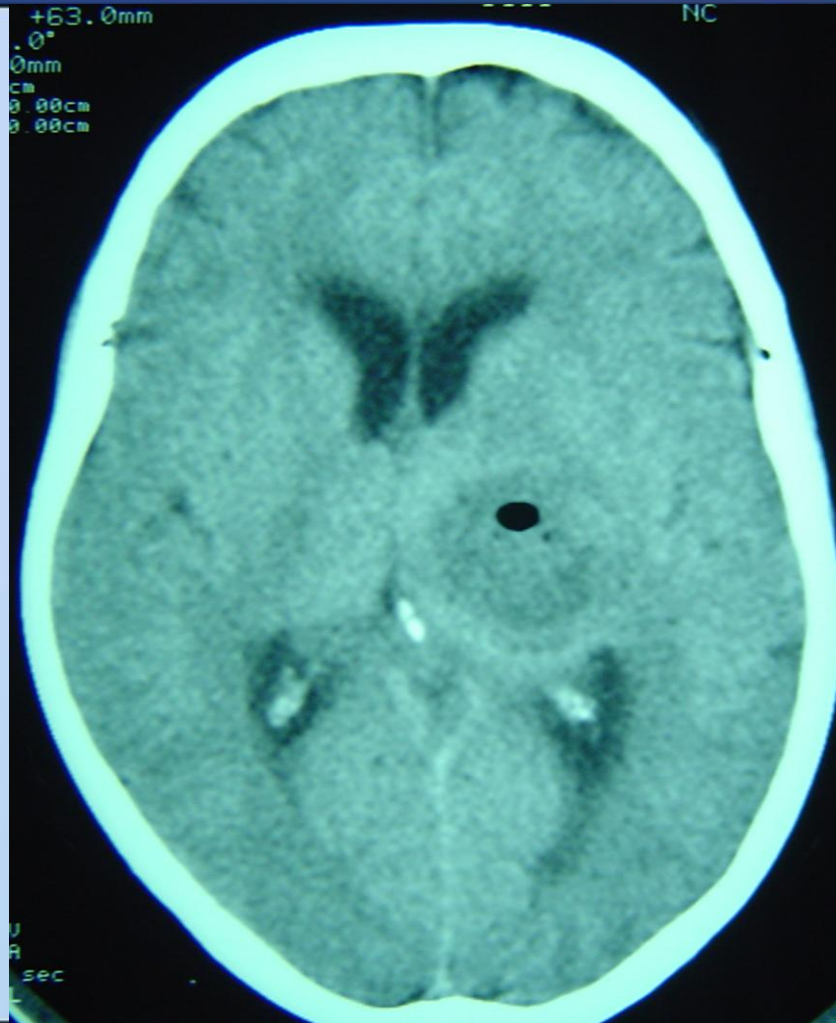
Jung et al: Neuroaxis Dissemination Pattern and Prognosis. Neurosurg Q. Volume 17.  
Number 3, 2007

♂, 60a, glioblastoma

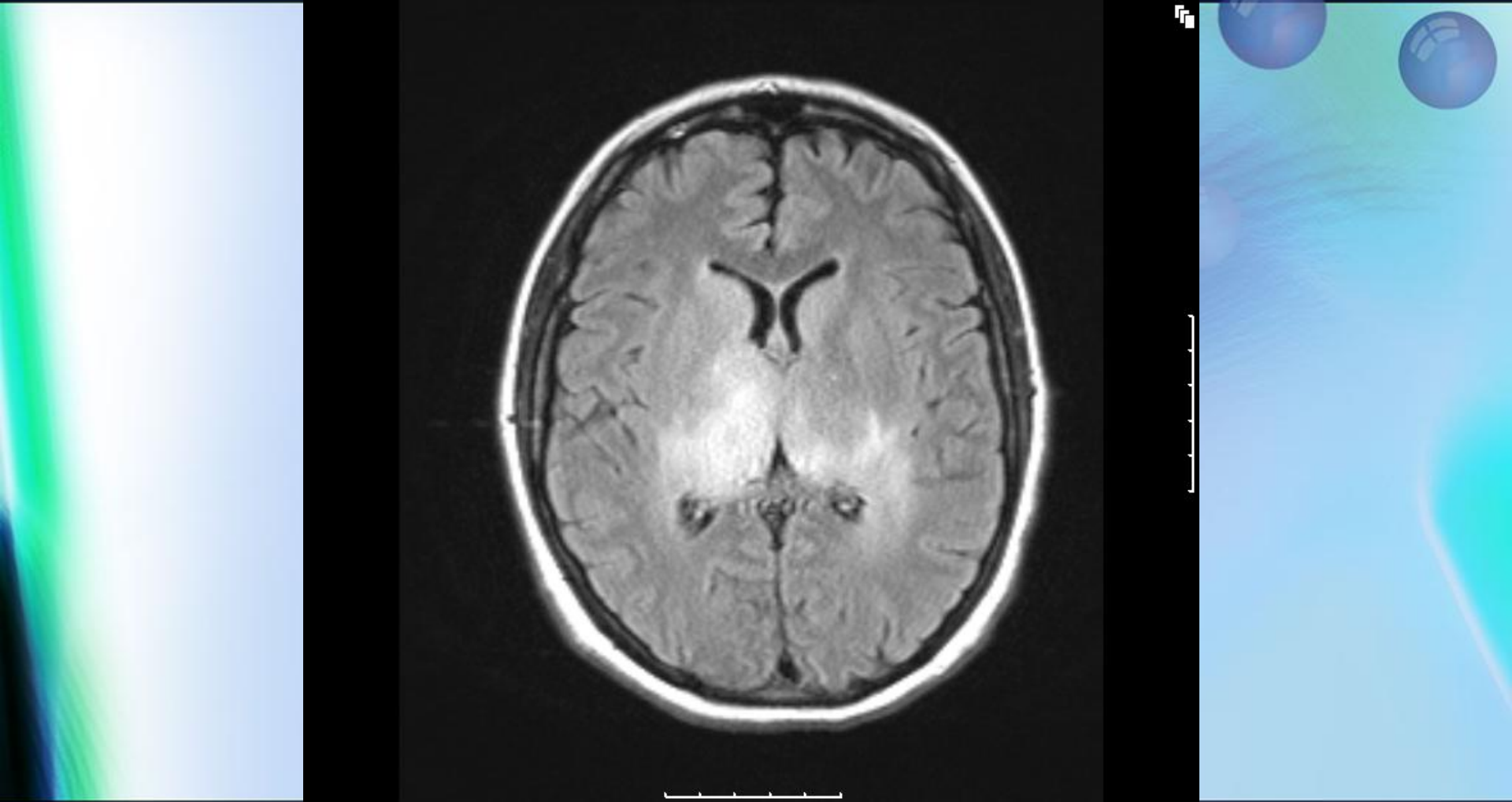




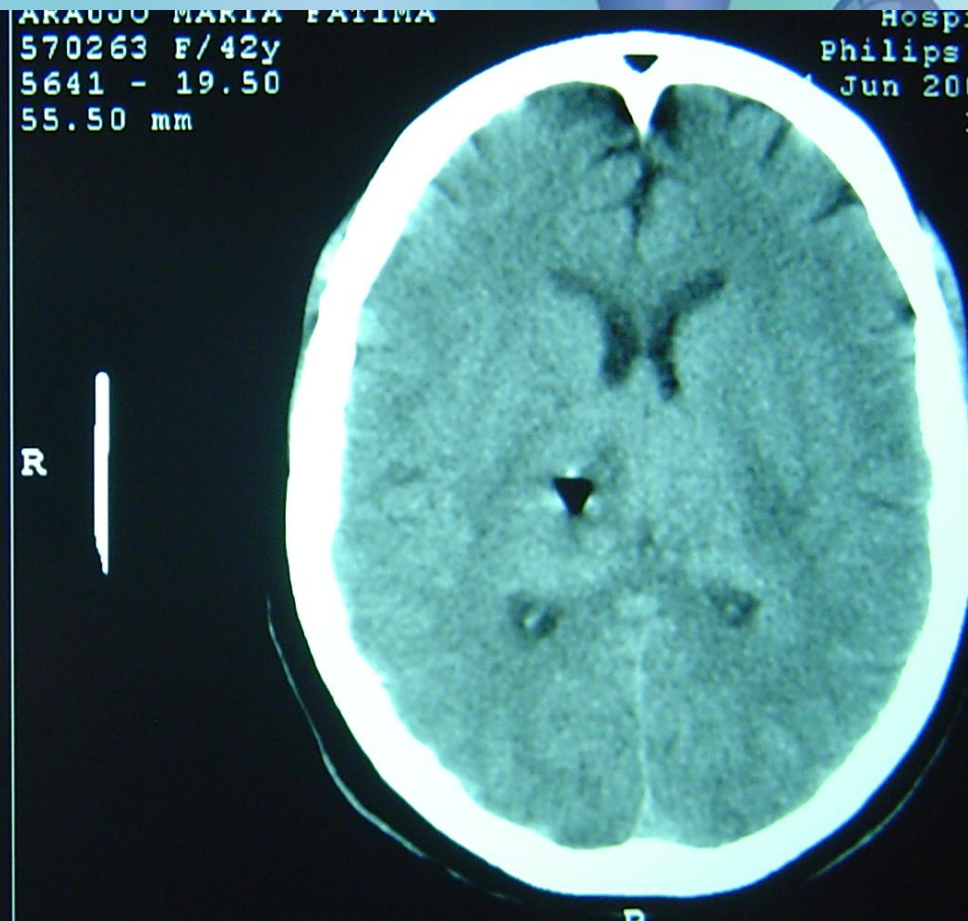
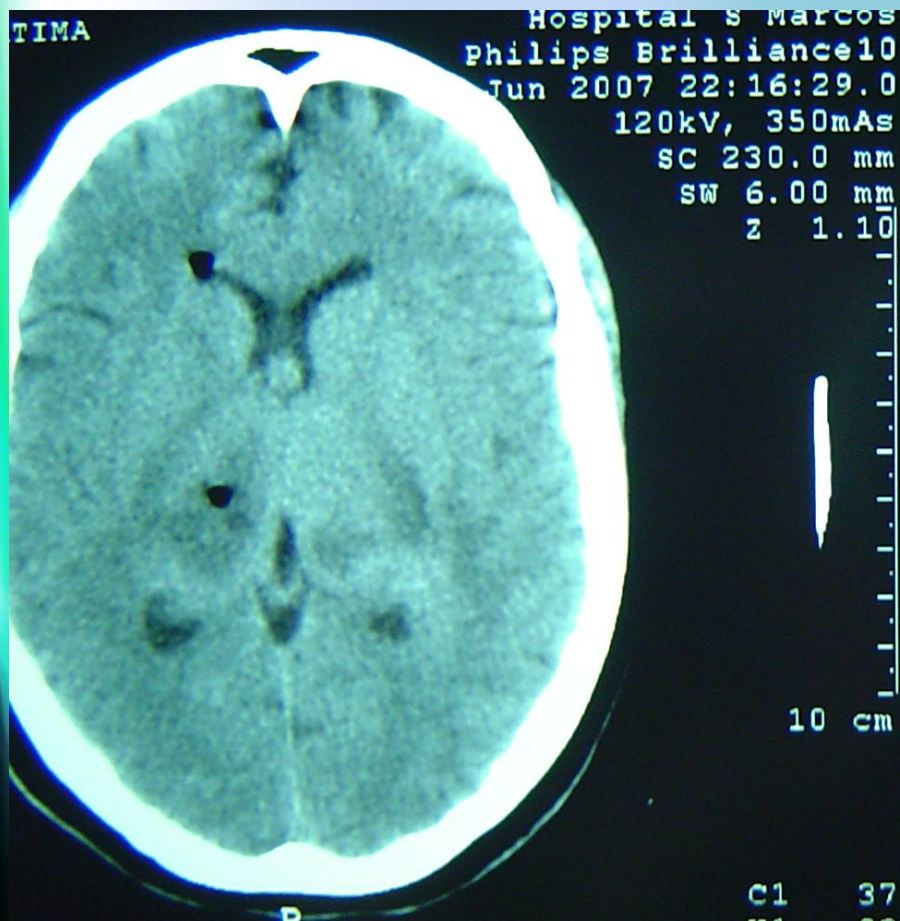
♂, 60a, glioblastoma



♀, 42a, astrocitoma fibrilar

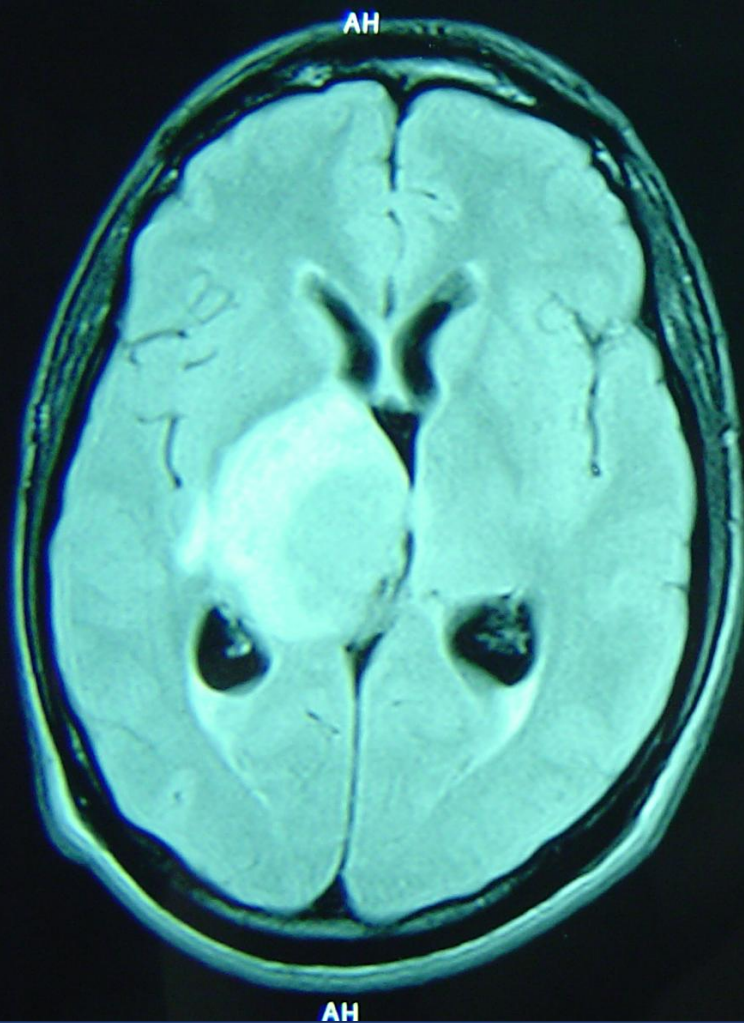


# ♀, 42a, astrocitoma fibrilar



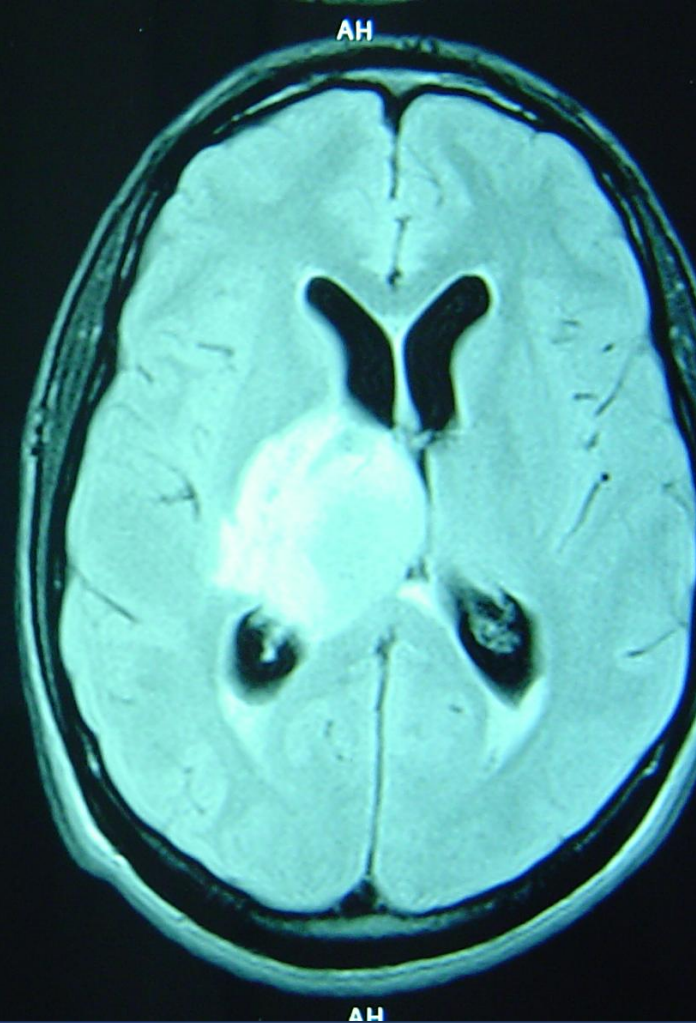


♂, 23a, germinoma (51 meses)



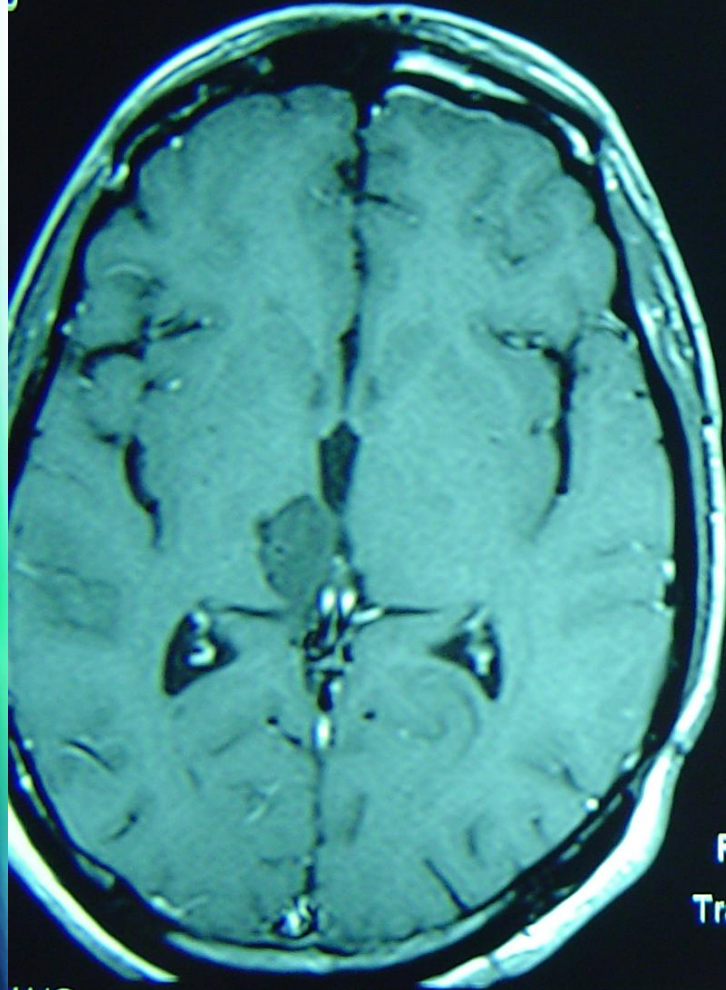
RFA

TE 108.0





♂, 23a, germinoma (51 meses)



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

R  
5cm

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

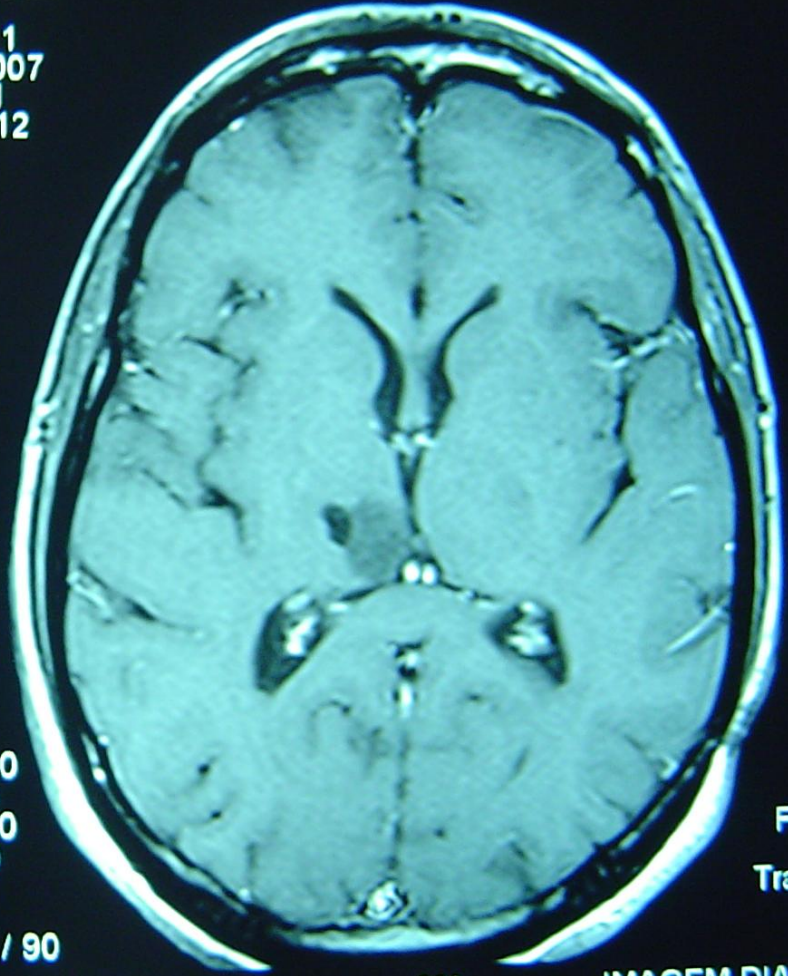
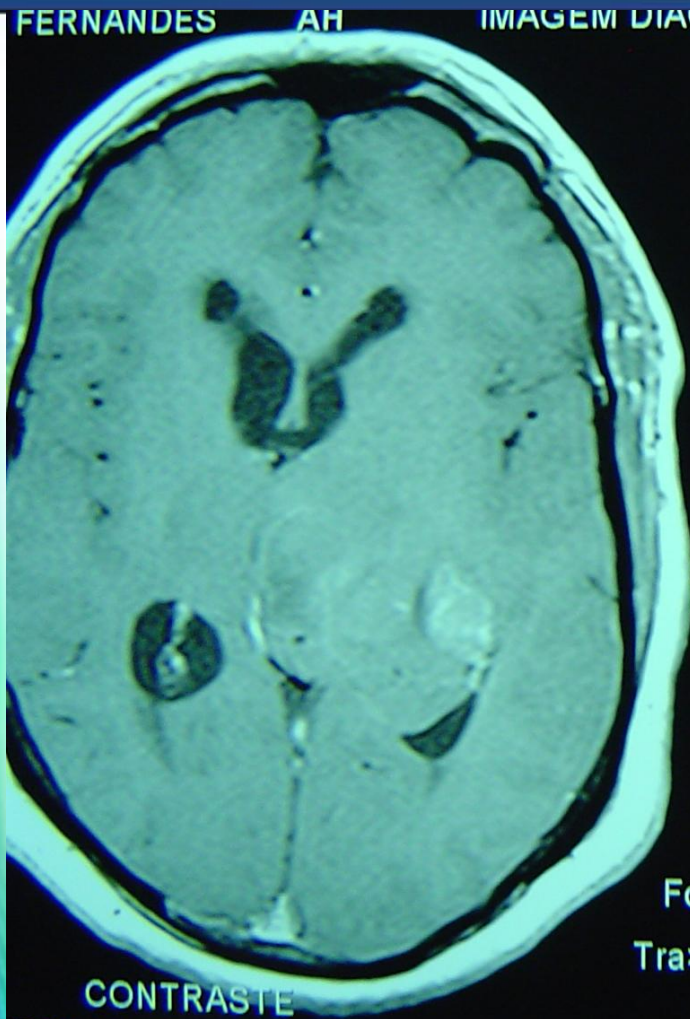


IMAGEM DIAG



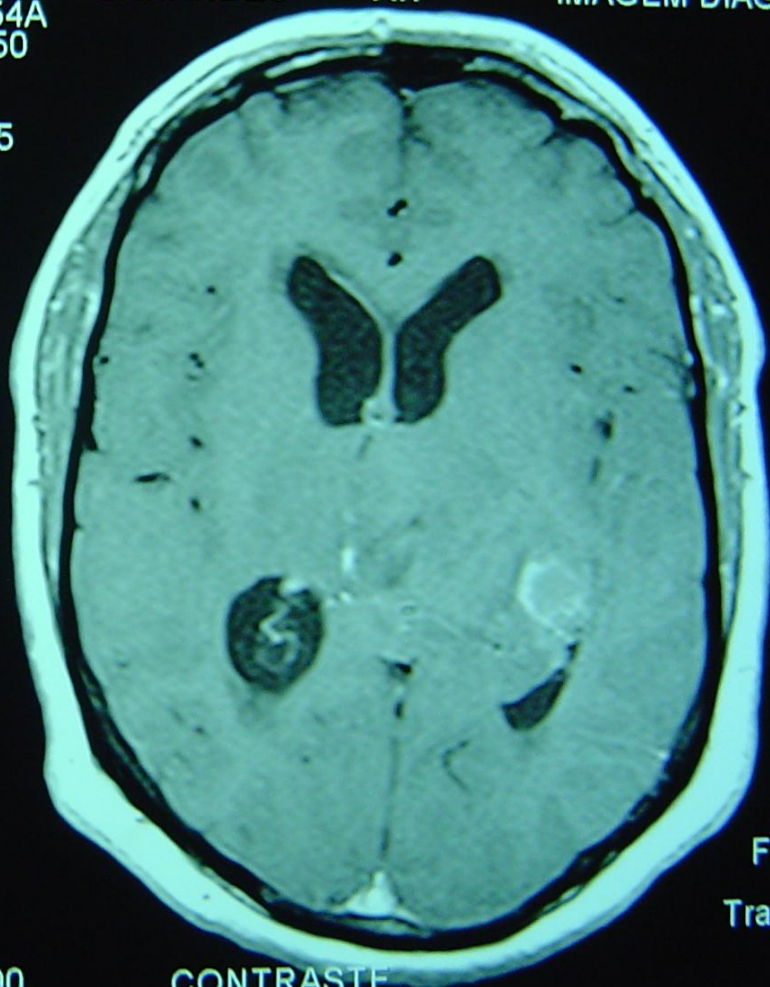
# ♂, 54a, glioblastoma (3,5 meses)



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



FoV  
Tra>

♂, 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



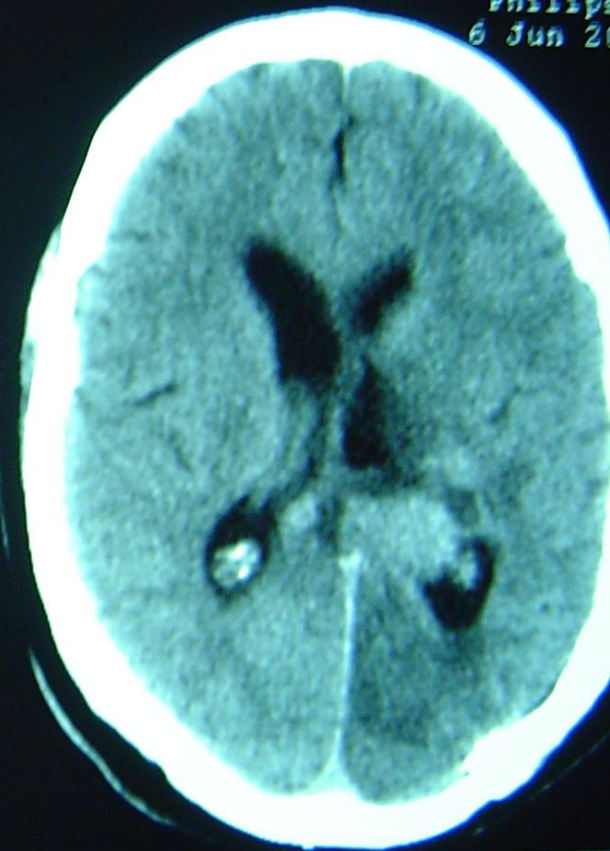
10 cm

21 35  
W1 70

FERNANDES DIAMANTINO  
517117 M/54y  
38336 - 27.90  
901.50 mm

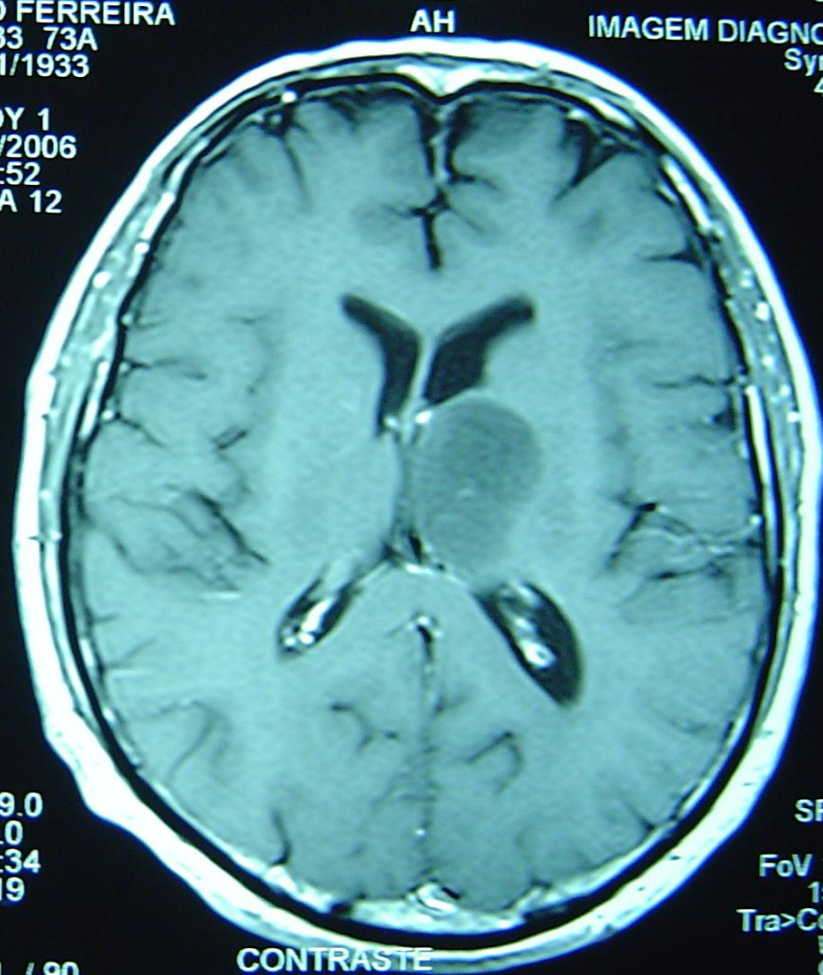
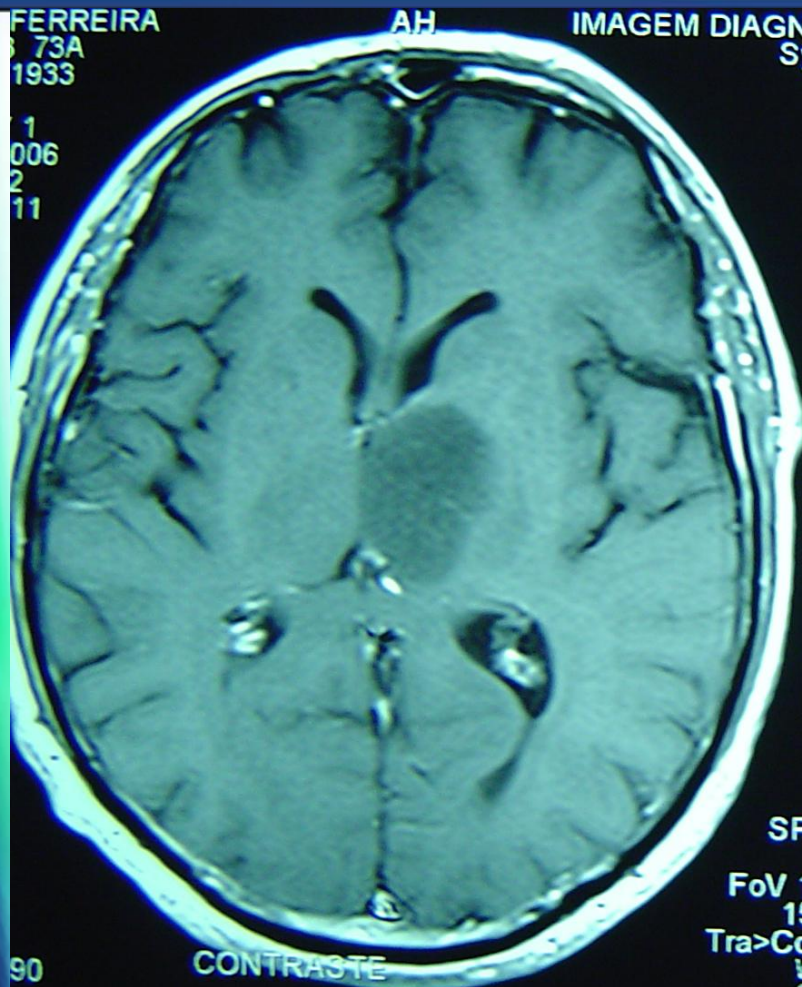
Hos:  
Philips  
6 Jun 20

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

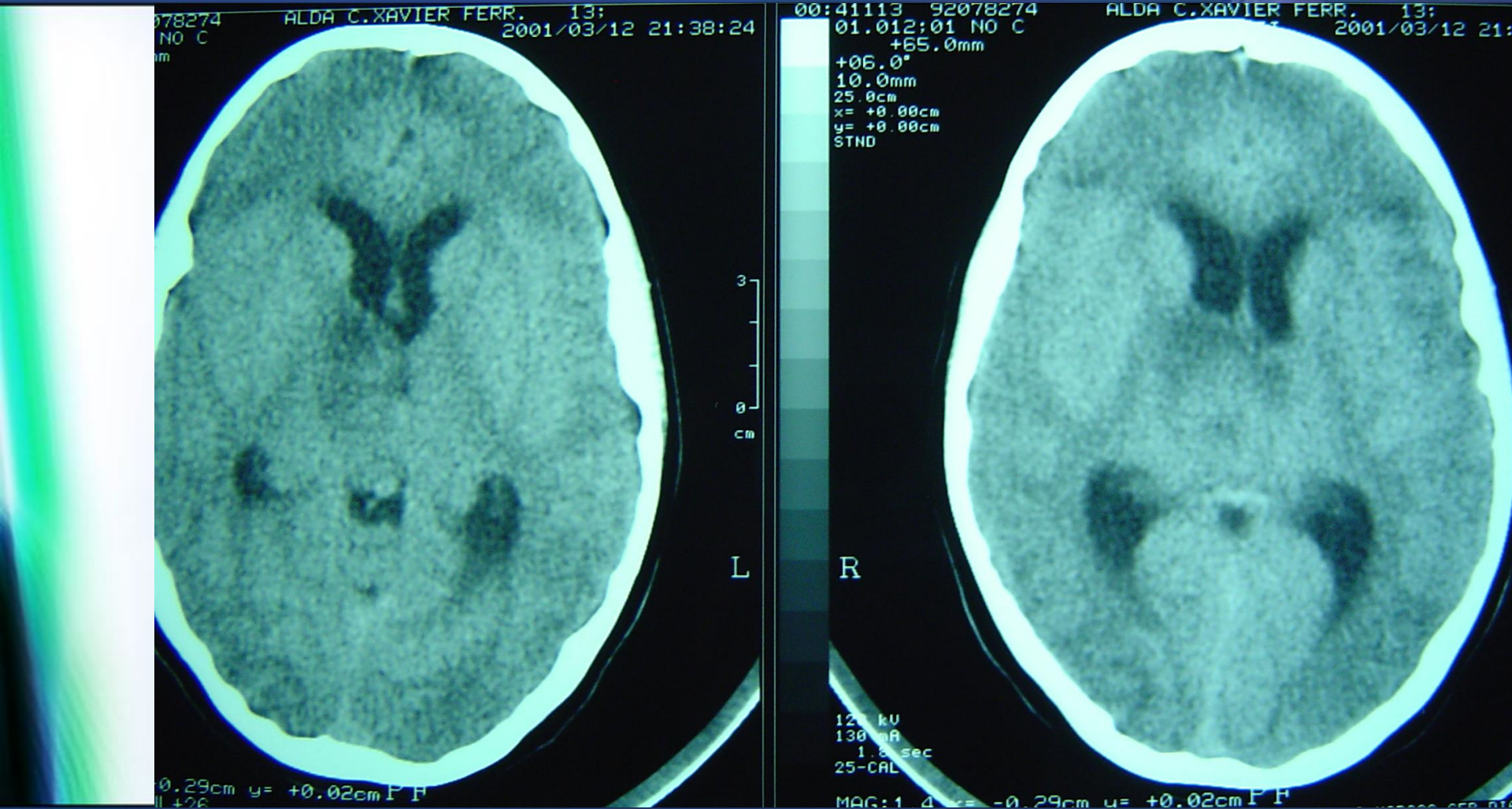


P

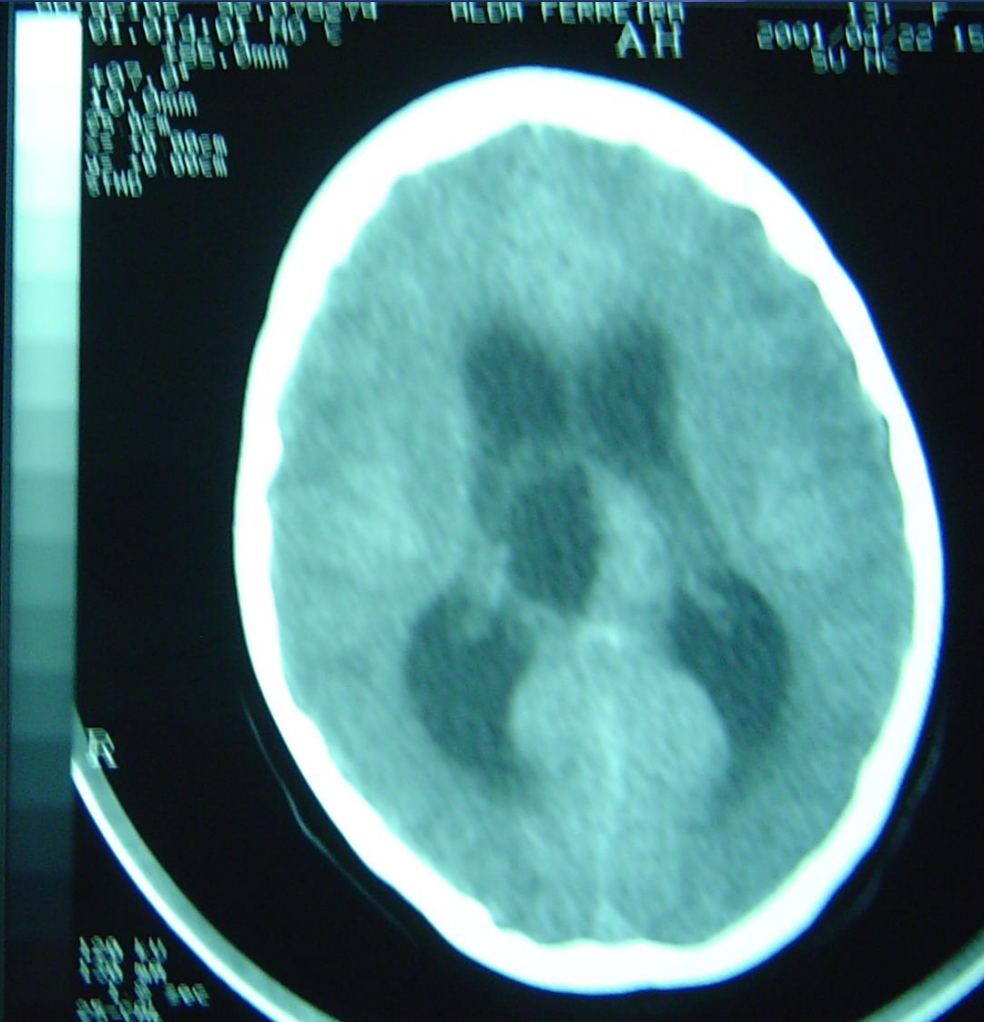
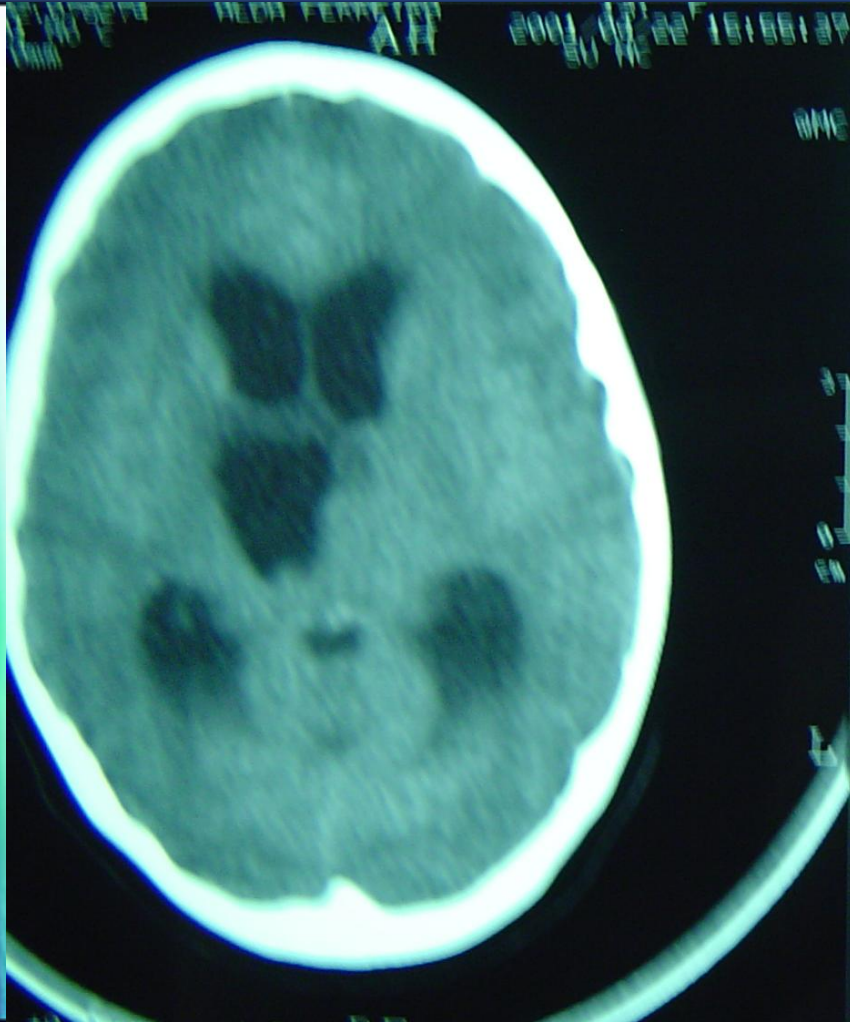
A2



♀, 12 a, ependimoma (10,5 meses)

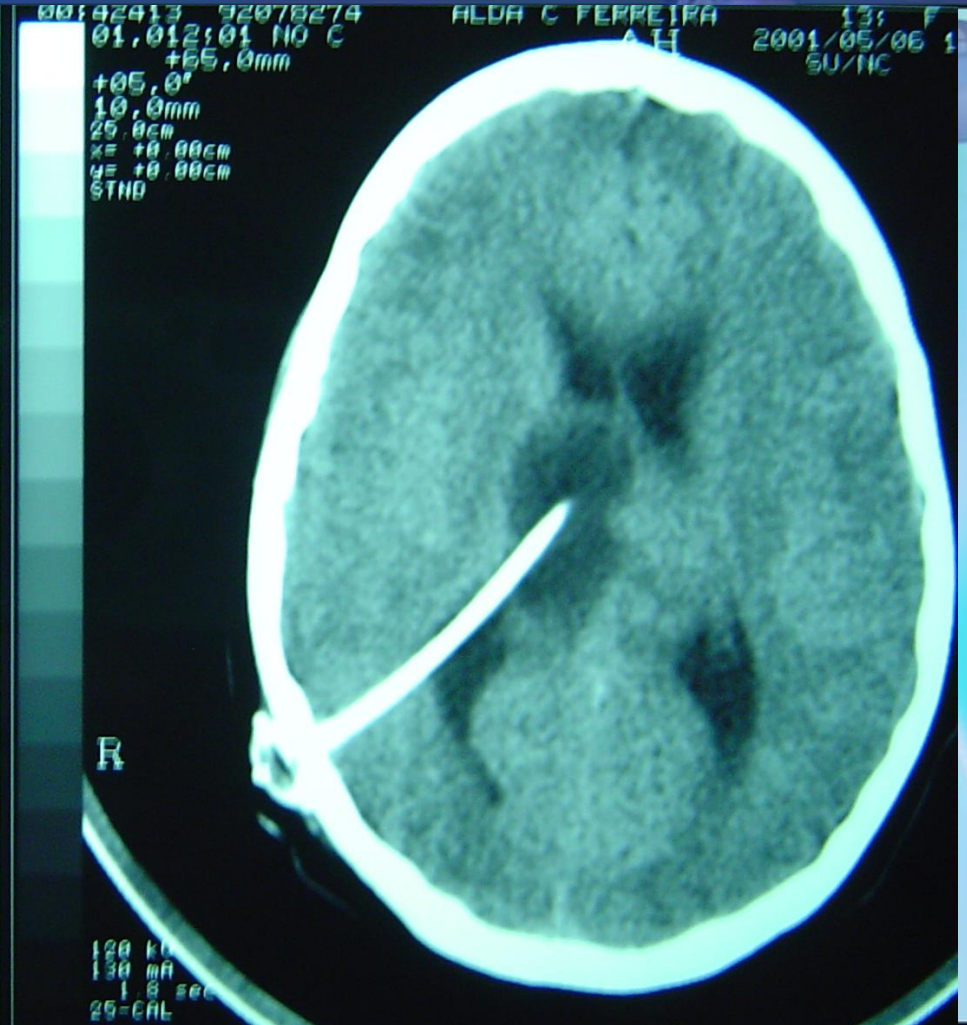
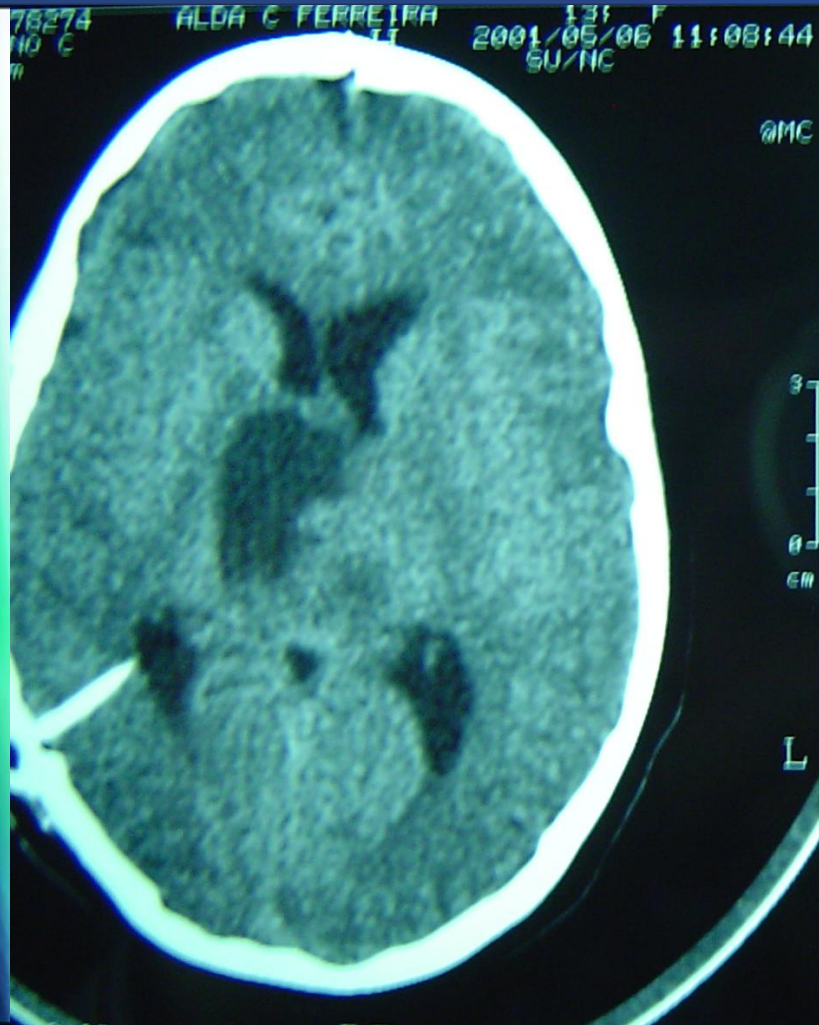


♀, 12 a, ependimoma (10,5 meses)

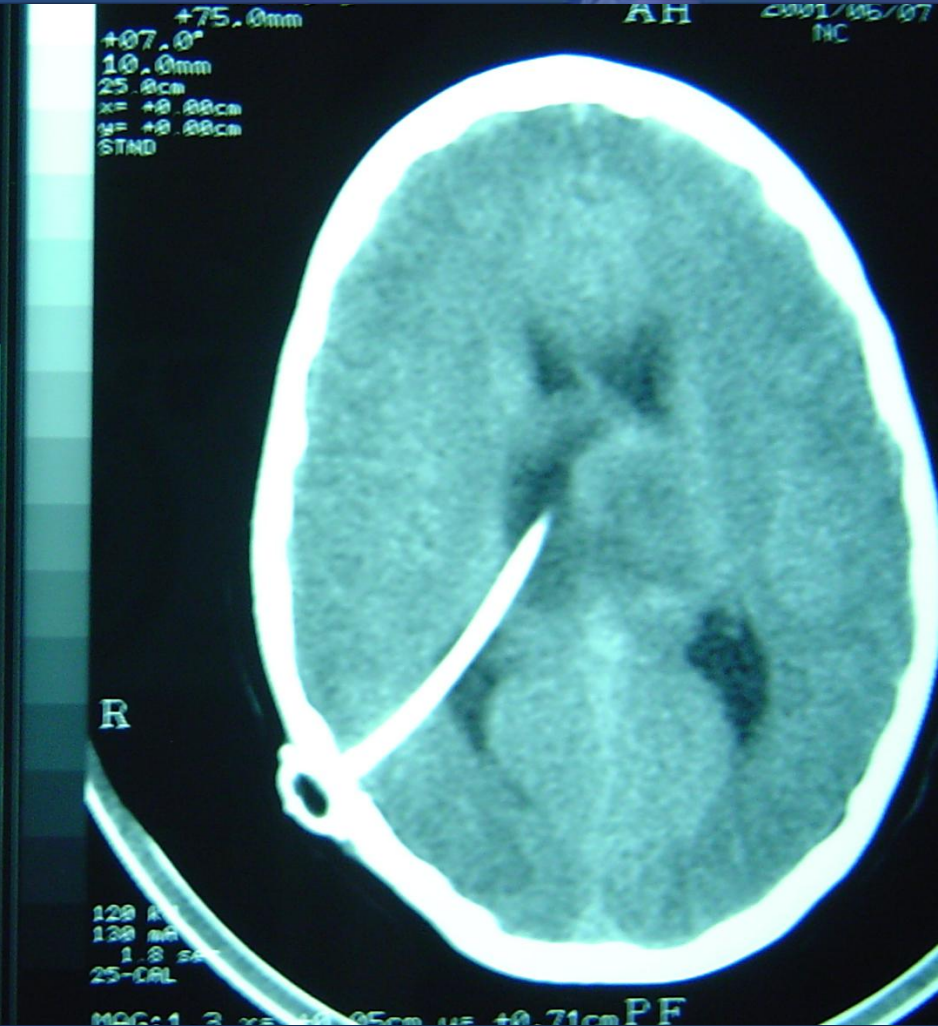
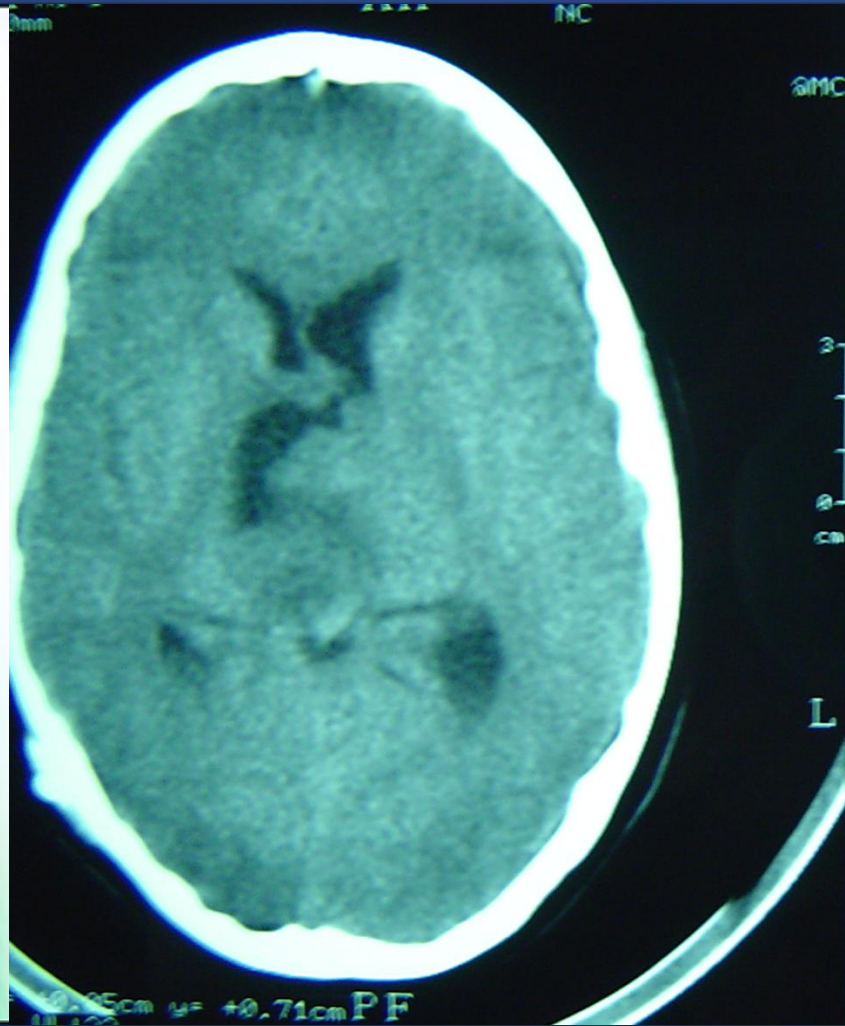




♀, 12 a, ependimoma (10,5 meses)

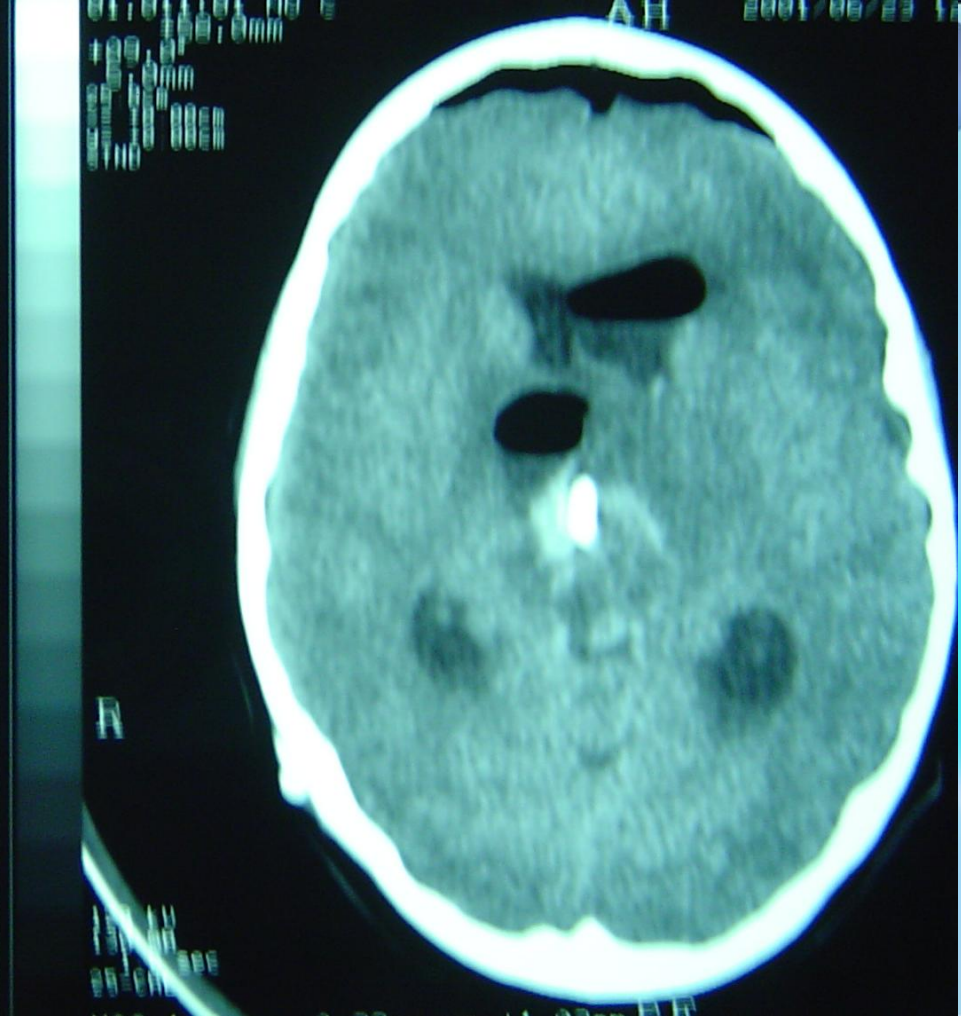
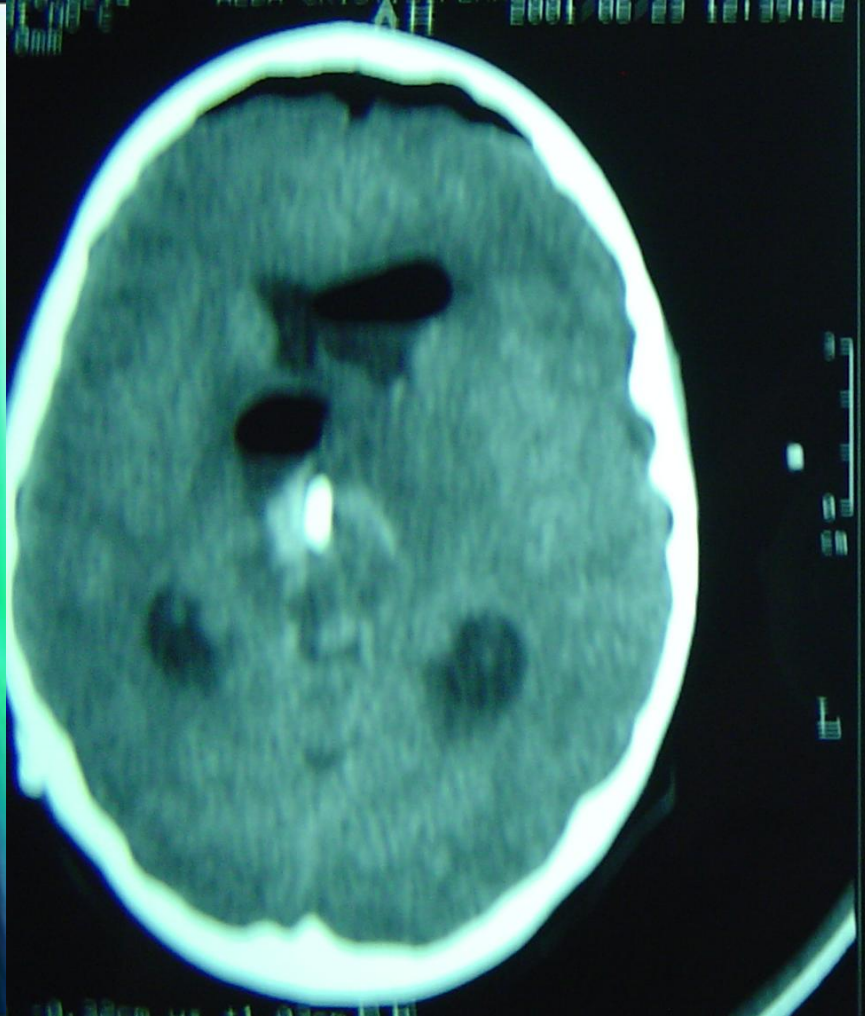


♀, 12 a, ependimoma (10,5 meses)



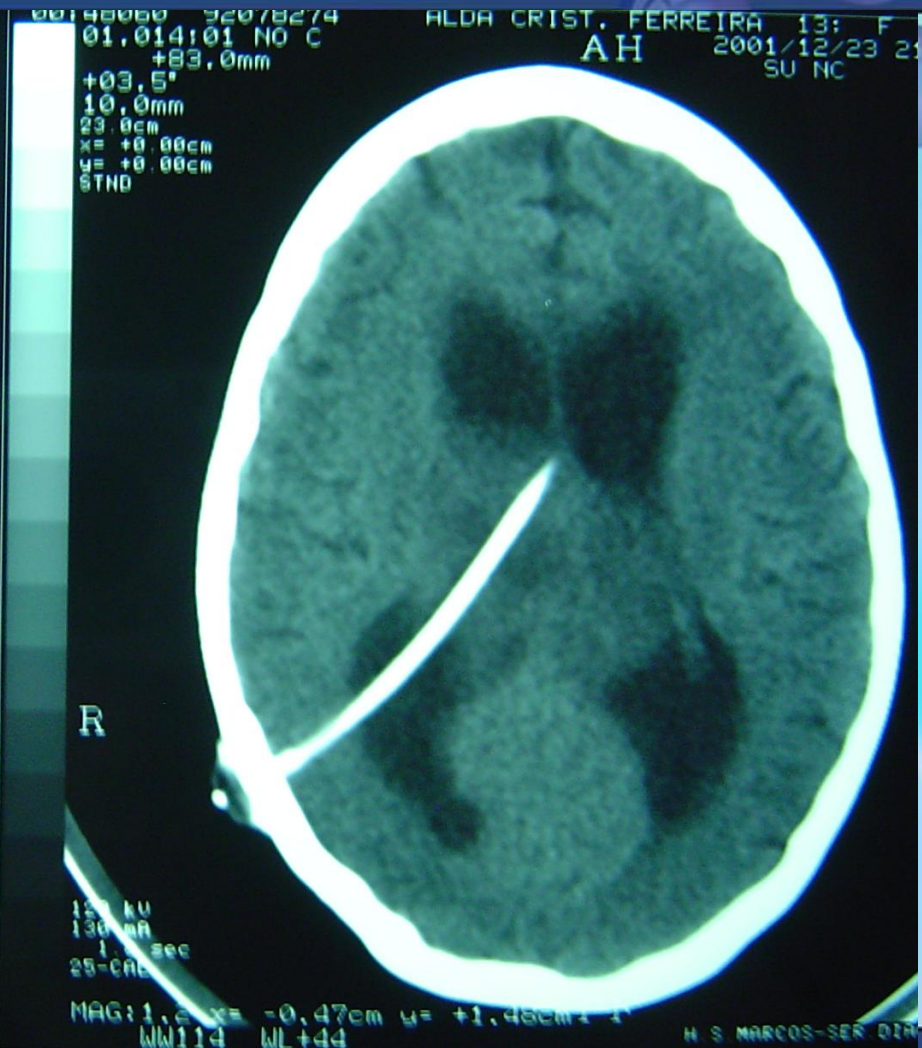
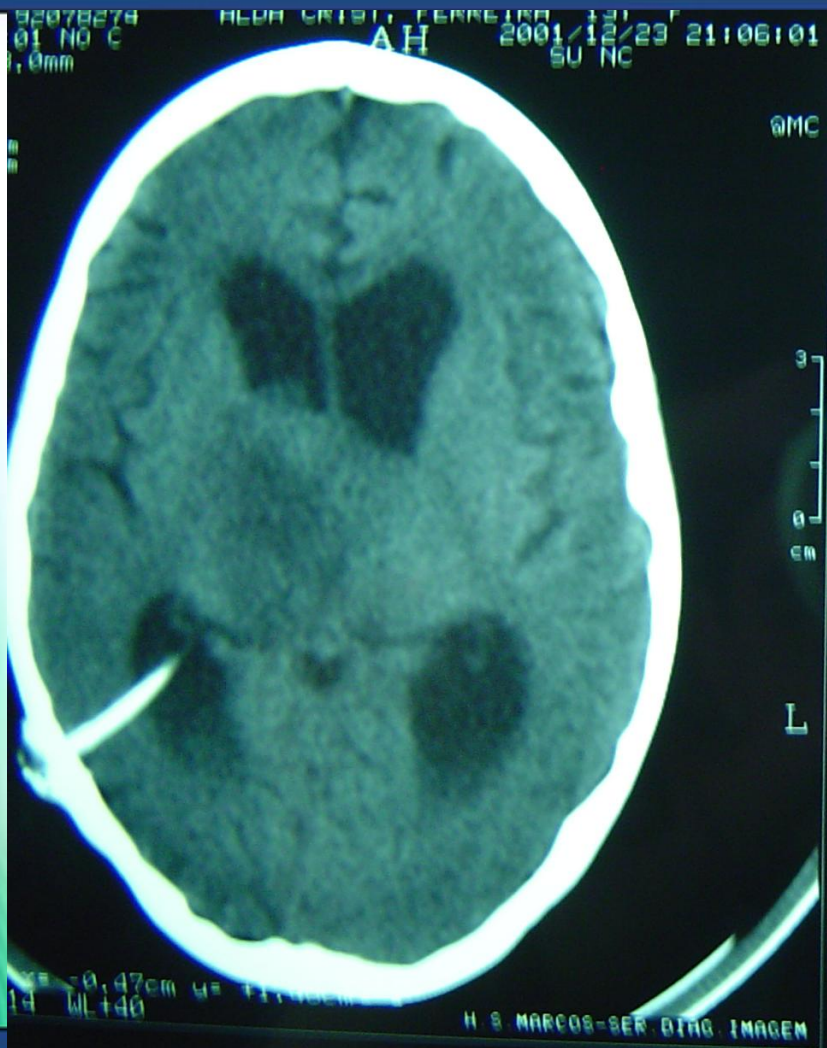


♀, 12 a, ependimoma (10,5 meses)



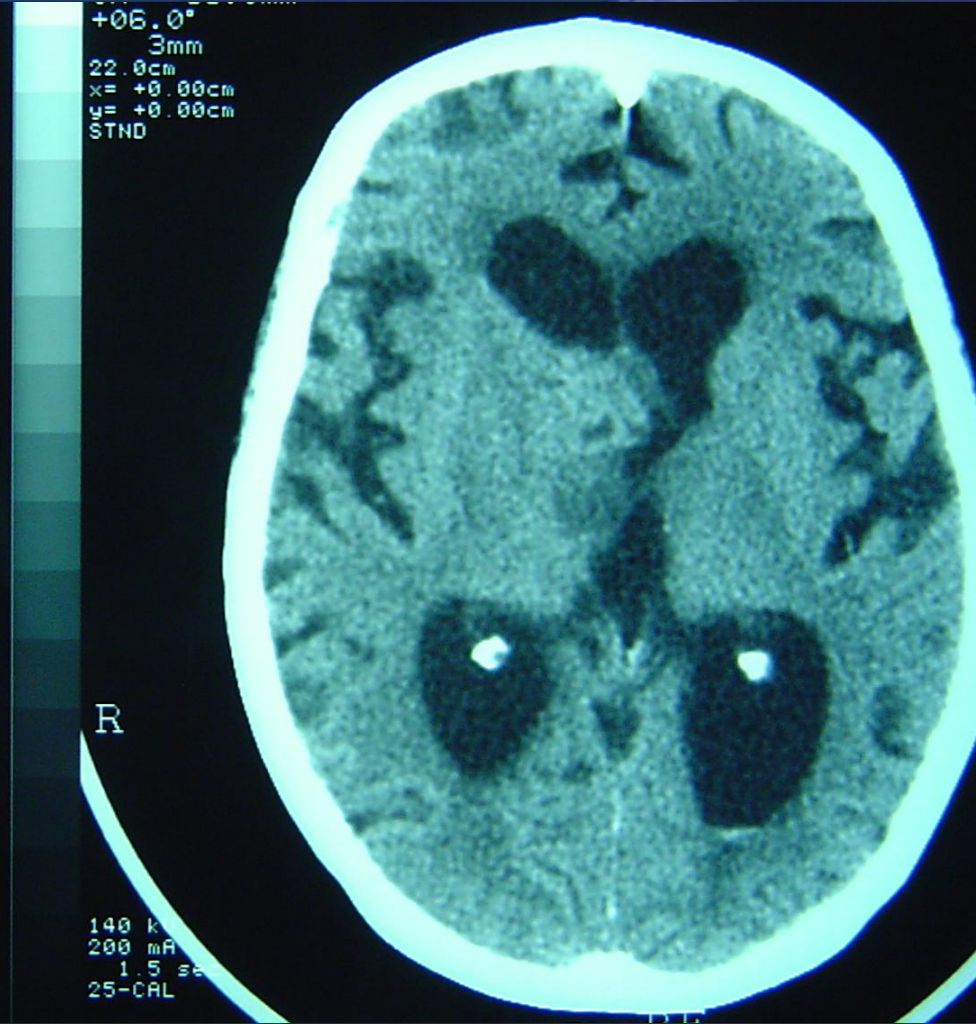
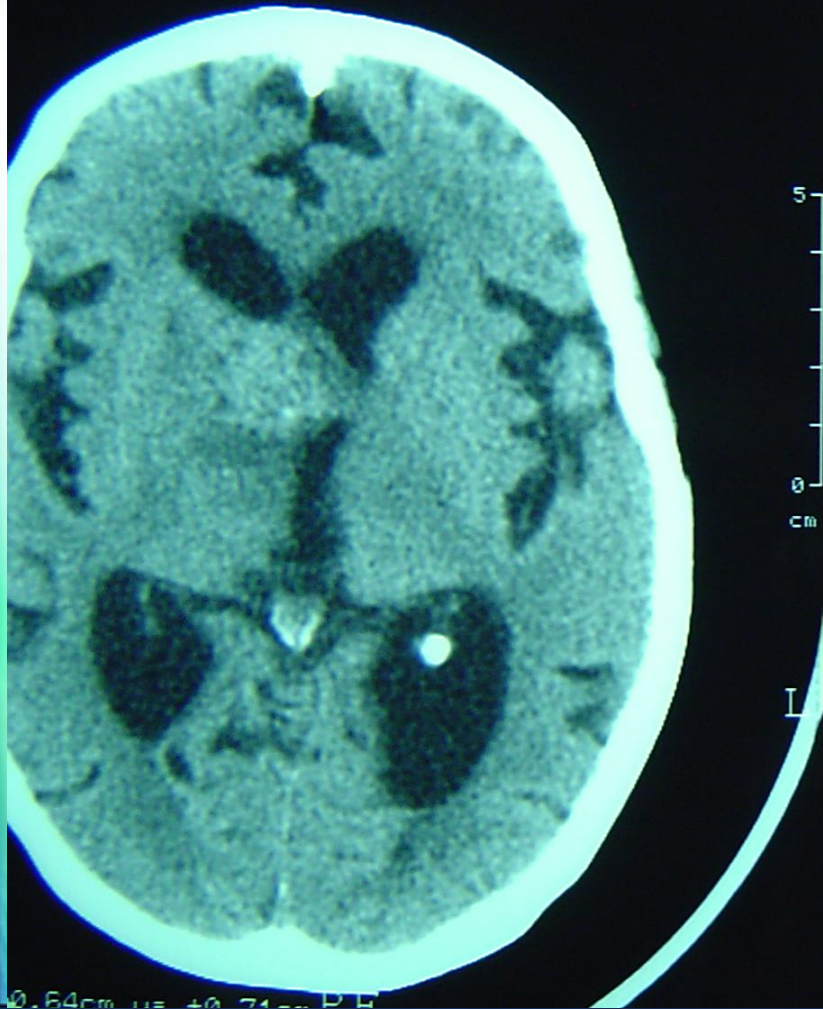


♀, 12 a, ependimoma (10,5 meses)



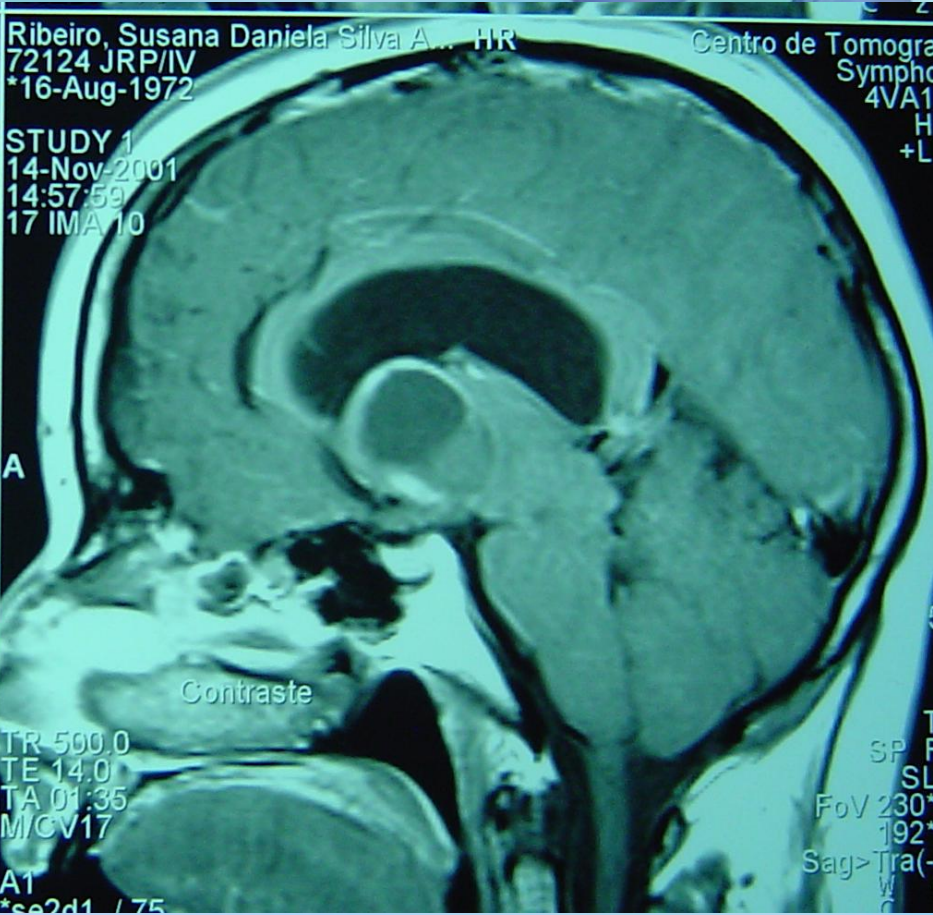
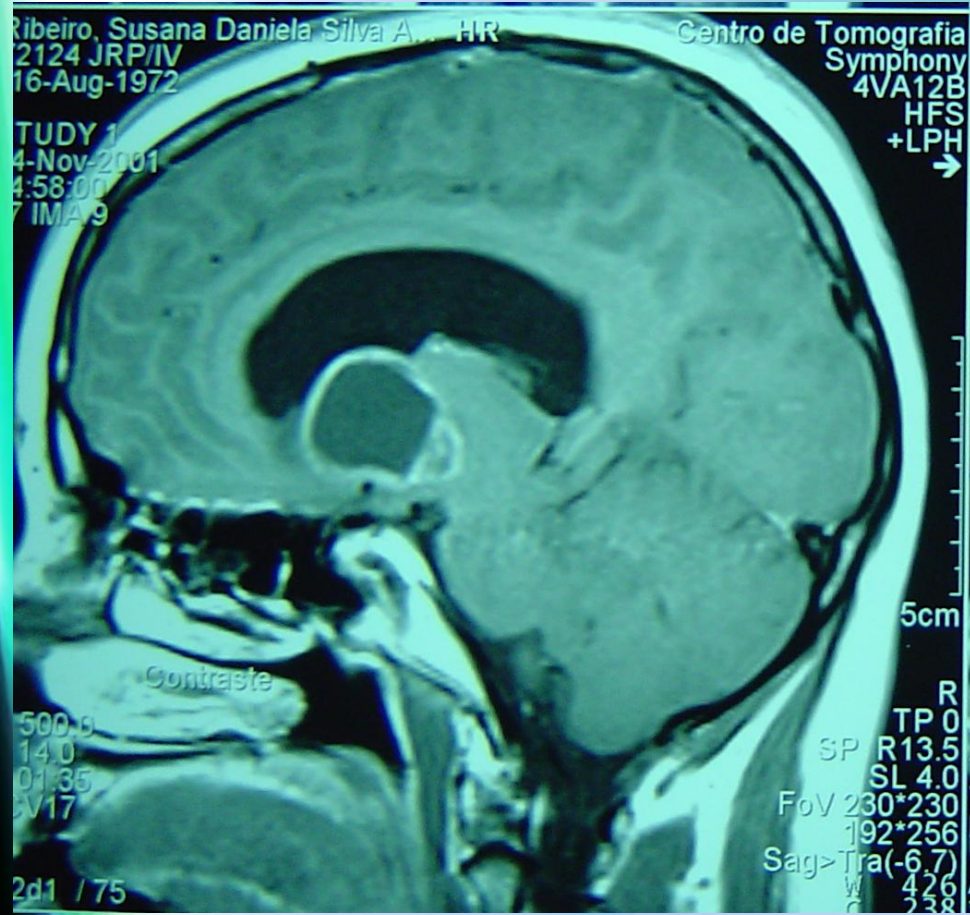


# ♀, 29a, glioblastoma (12,5 meses)



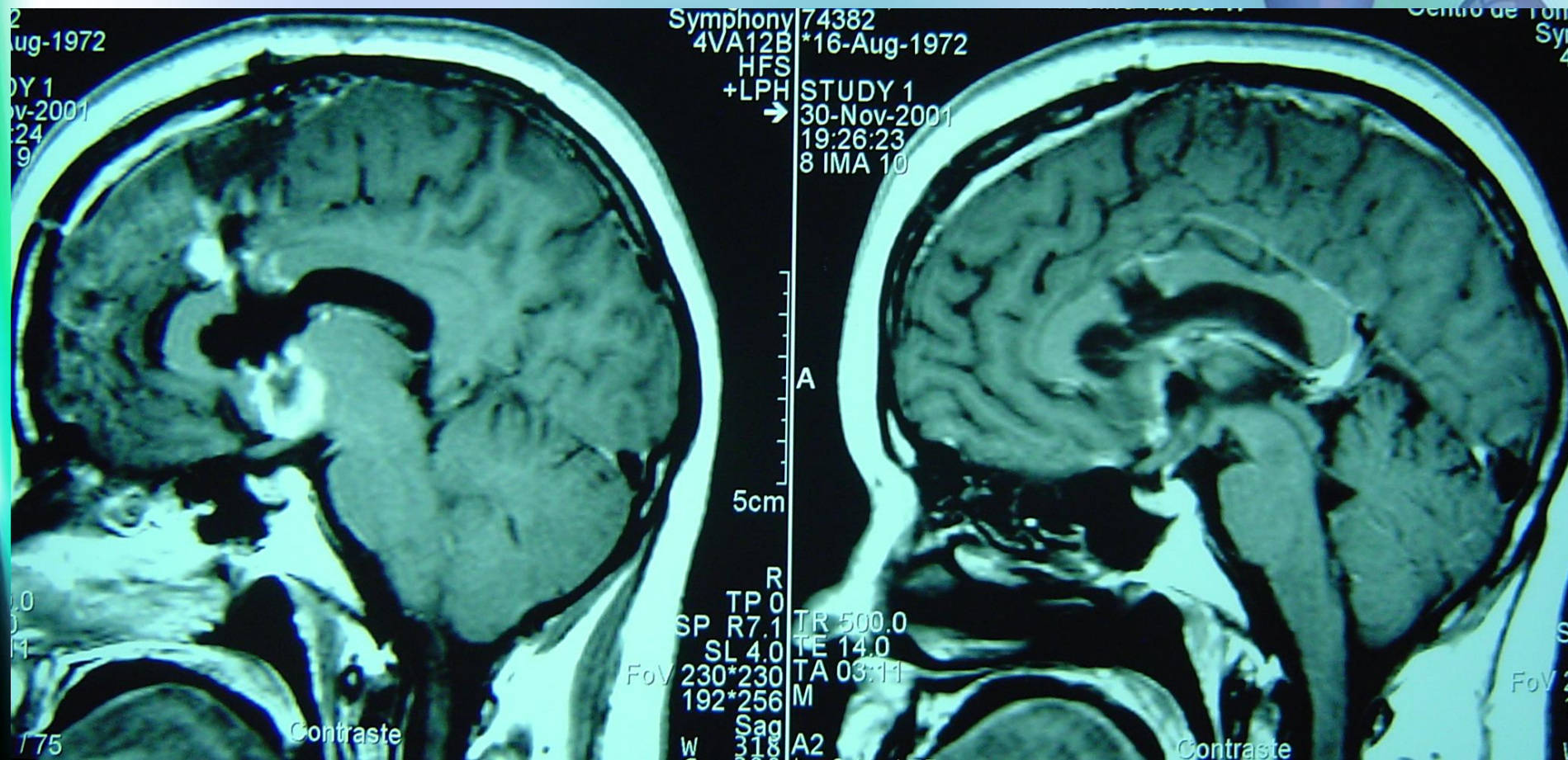


# ♀, 29a, glioblastoma (12,5 meses)



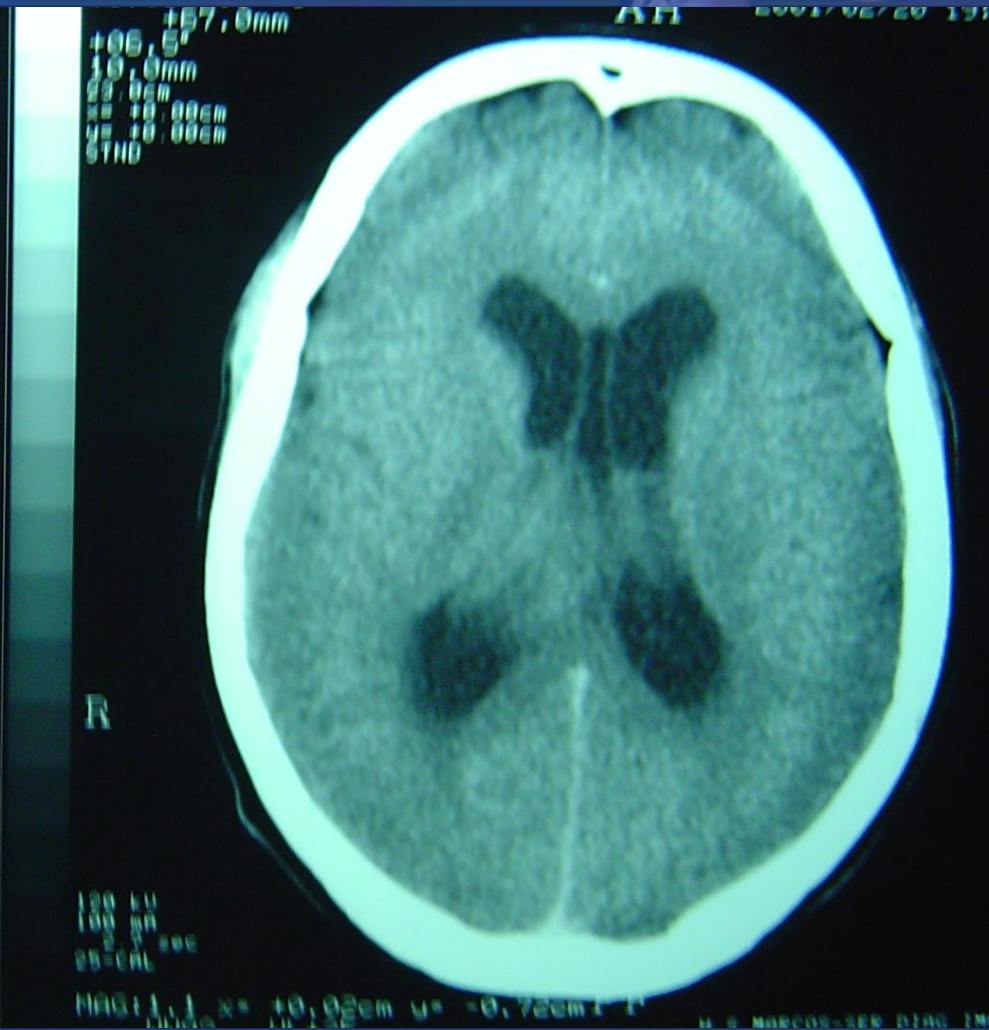
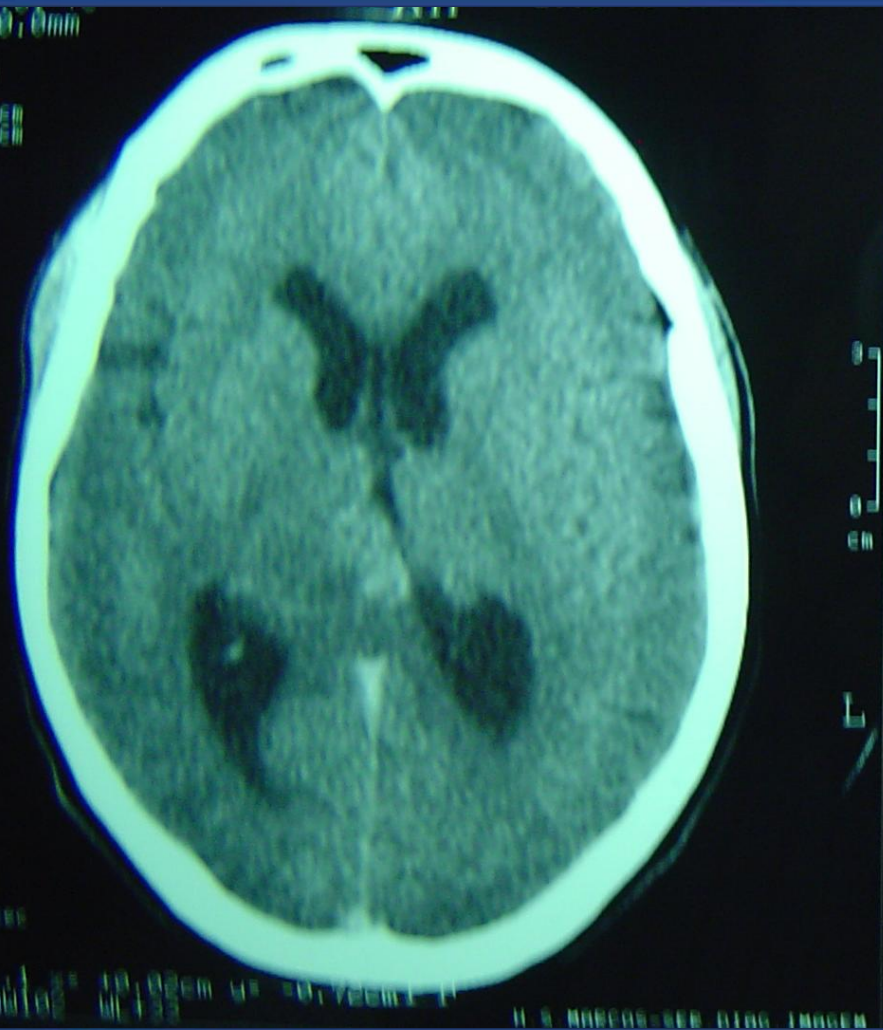


# ♀, 29a, glioblastoma (12,5 meses)



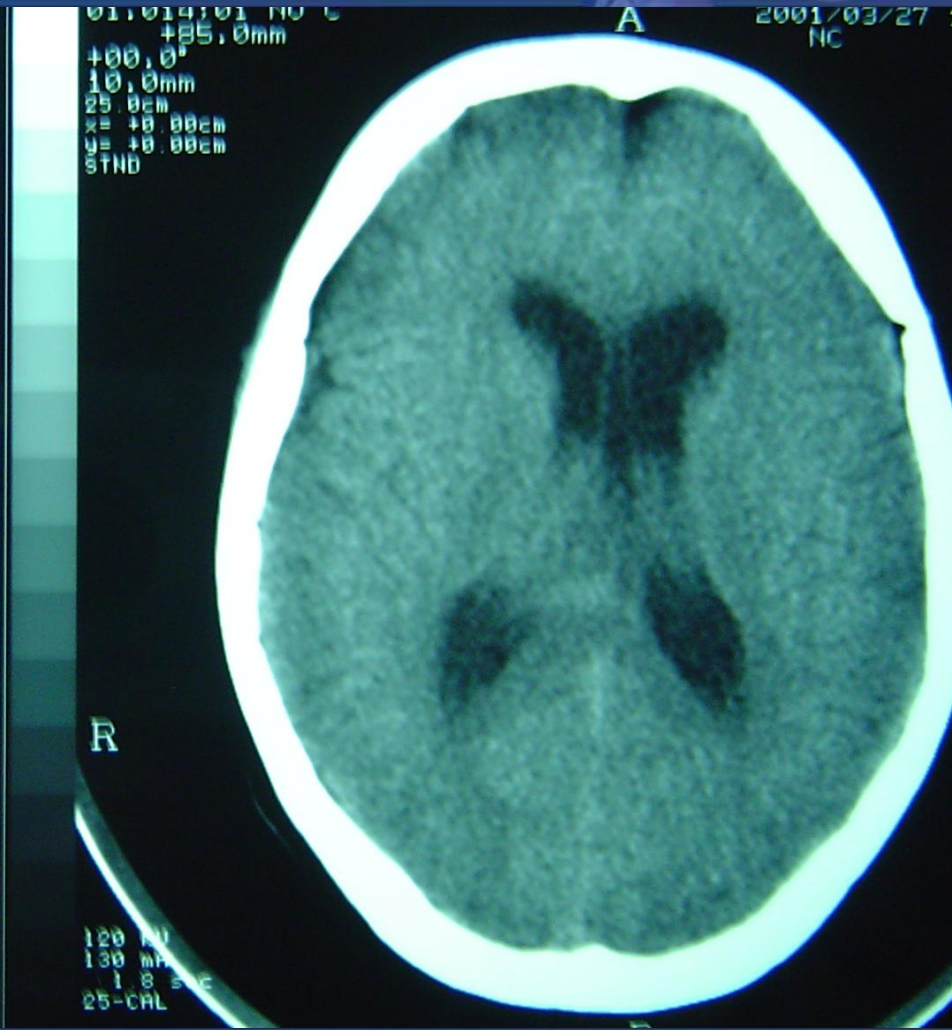
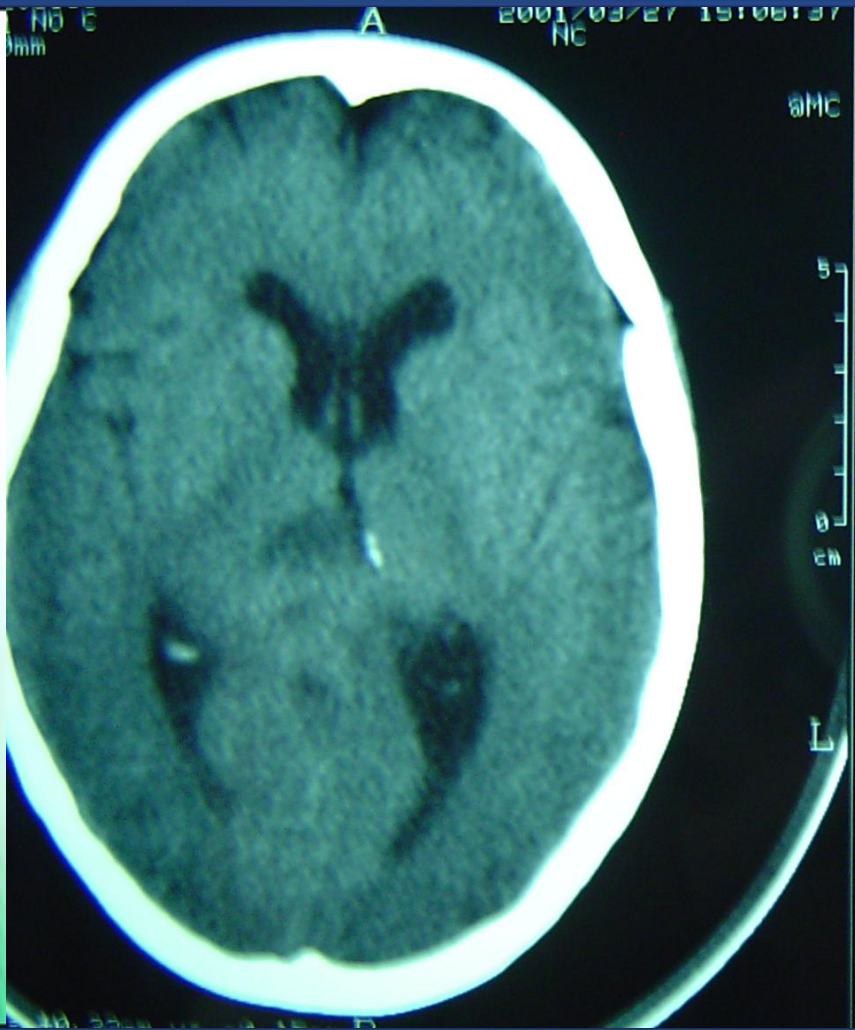


♀, 38a, glioblastoma (12,5 meses)





♀, 38a, glioblastoma (12,5 meses)

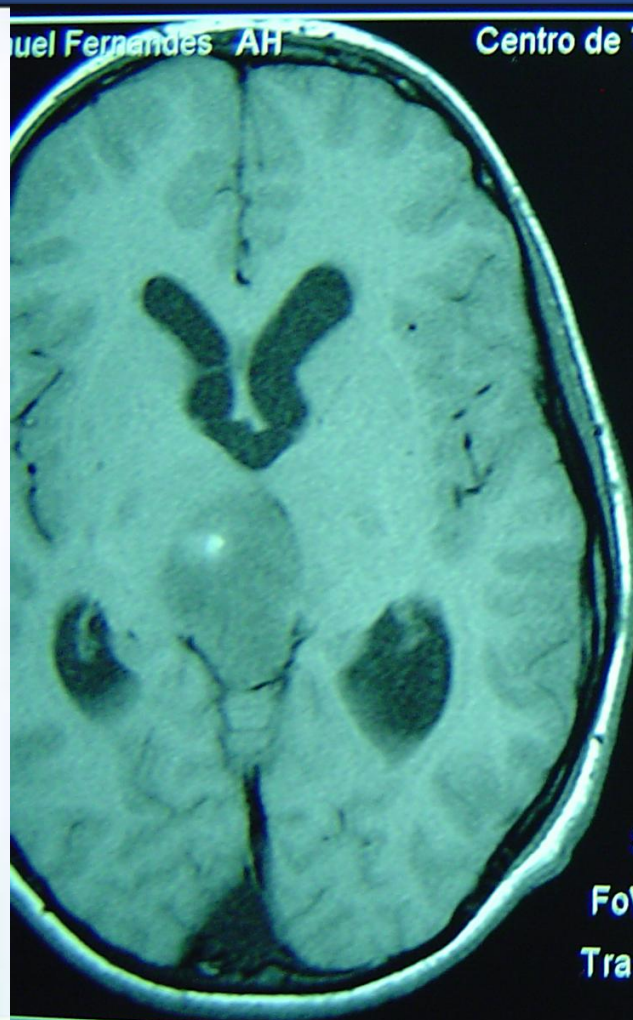


♀, 38a, glioblastoma (12,5 meses). Mtx L2-L3





♂, 15 anos, glioblastoma (16 meses)



Centro de Tomografia  
Symphony  
4VA15A  
HFS  
+LPH

Gomes, Fabio Manuel Fernandes AH

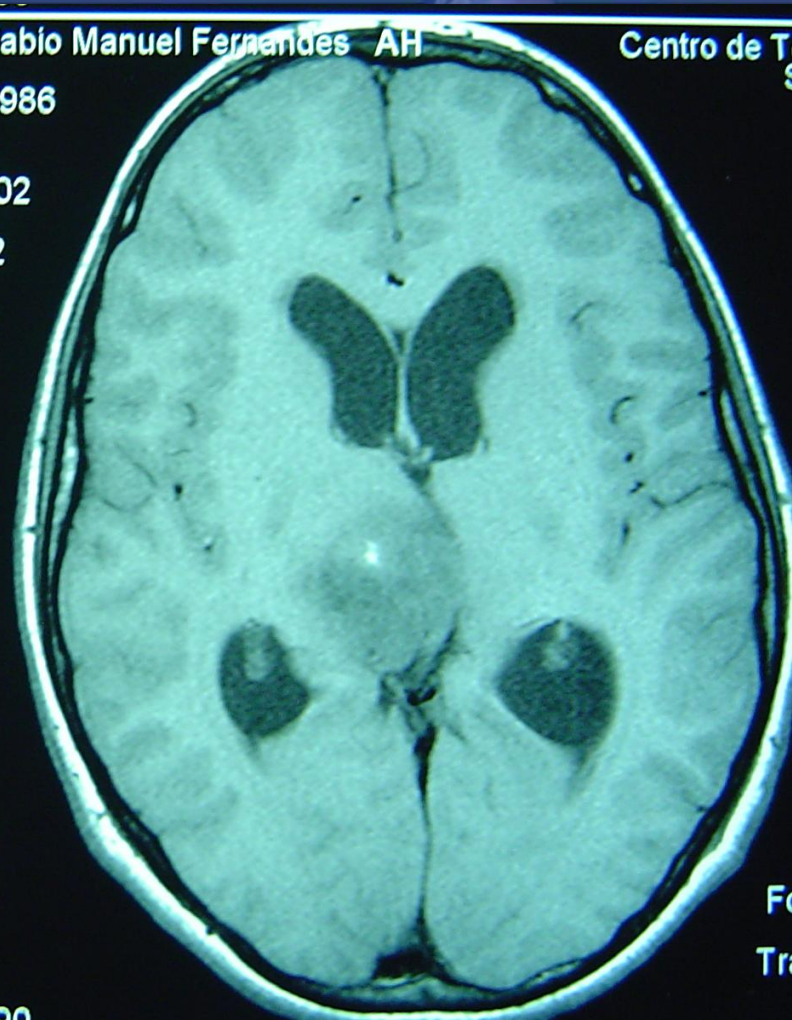
106507  
\*13-Oct-1986

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  
C 267 \*se2d1 / 90

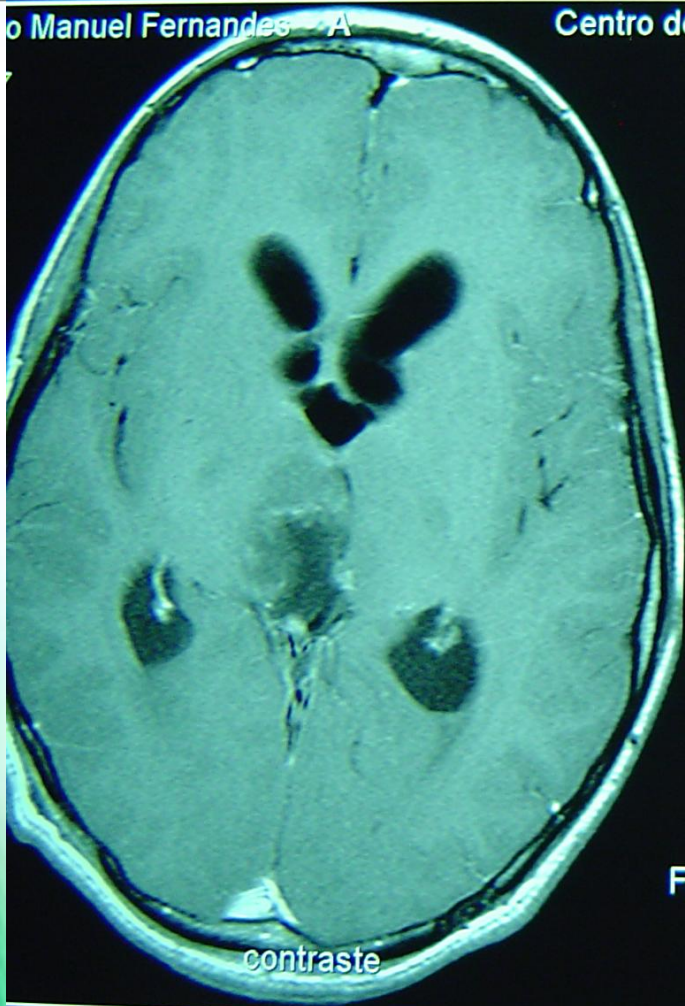


Centro de T

FO  
Tr



# ♂, 15 anos, glioblastoma (16 meses)



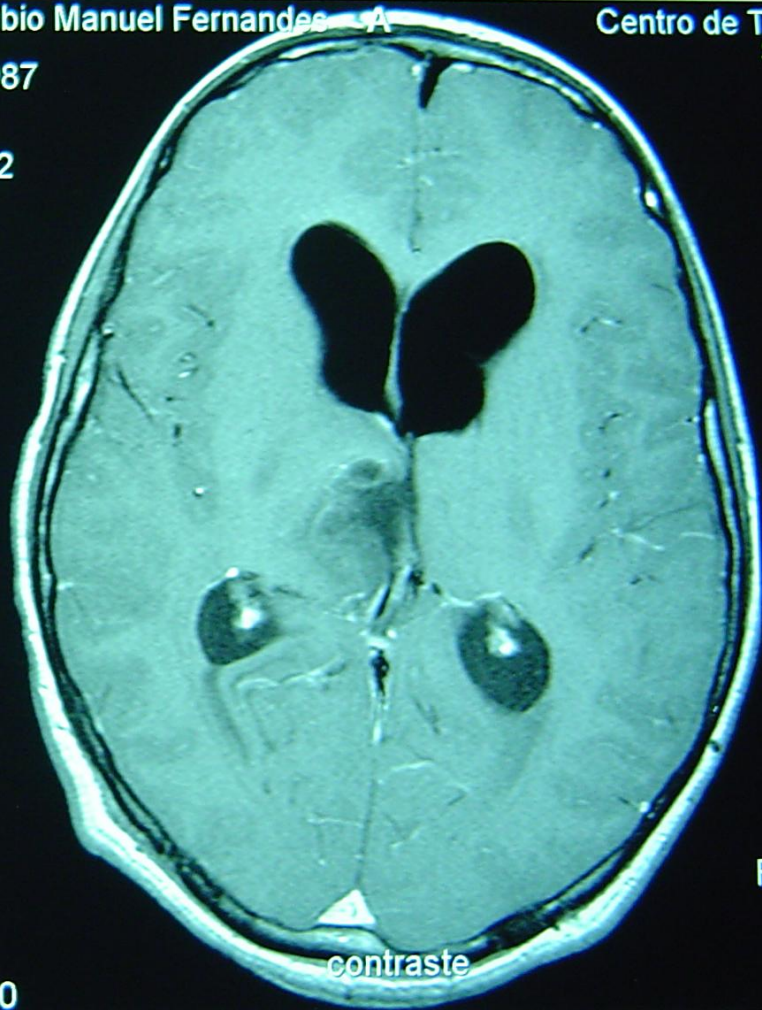
Centro de Tomografia Gomes, Fabio Manuel Fernandes - A

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

Centro de T

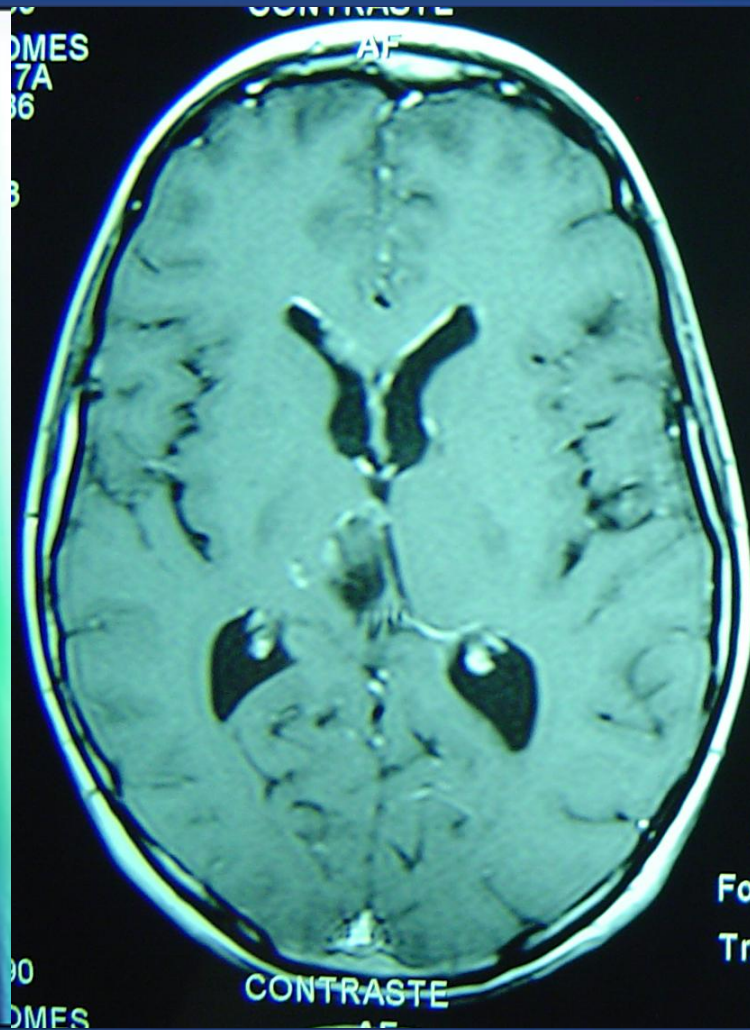
R  
5cm

R  
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211\*512s M  
Tra  
W 658 A2  
C 357 \*se2d1 / 90

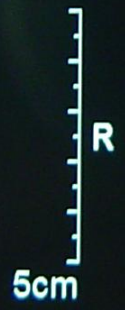




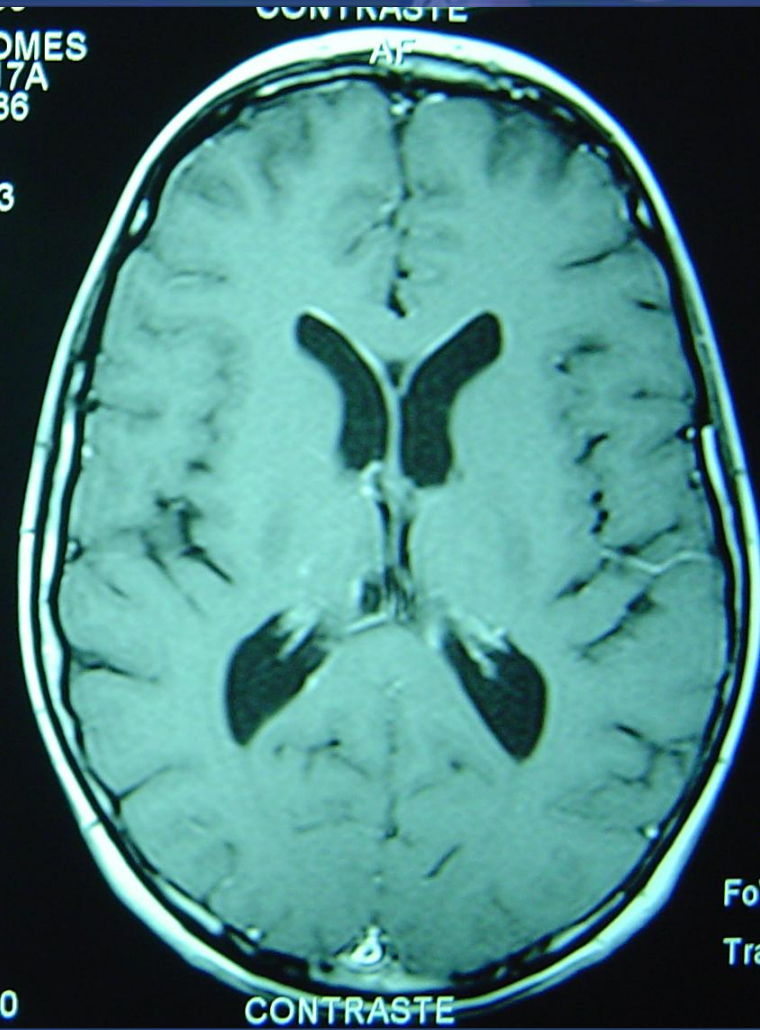
♂, 15 anos, glioblastoma (16 meses). Carcinomatose meníngea



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

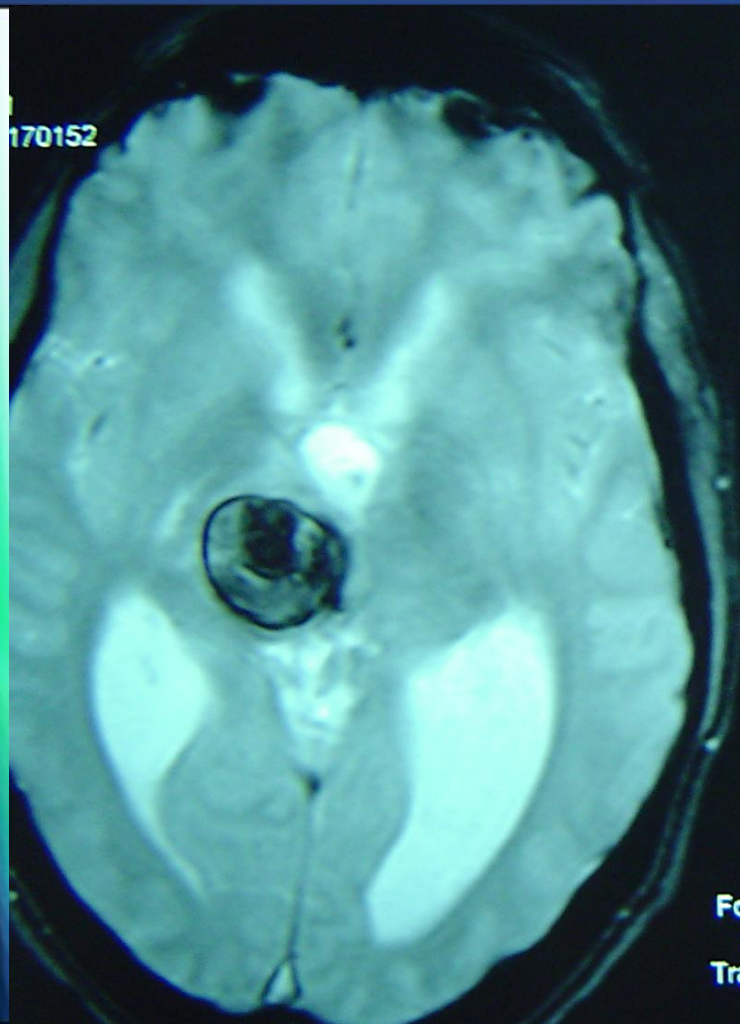


I/R  
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SL 4.0 TE 15.0  
FoV 186\*230 TA 03:34  
156\*256s M/CV19  
Tra>Cor(5.8)  
W 584 A3  
C 344 \*se2d1 / 90





# ♂, 27a, angioma cavernoso

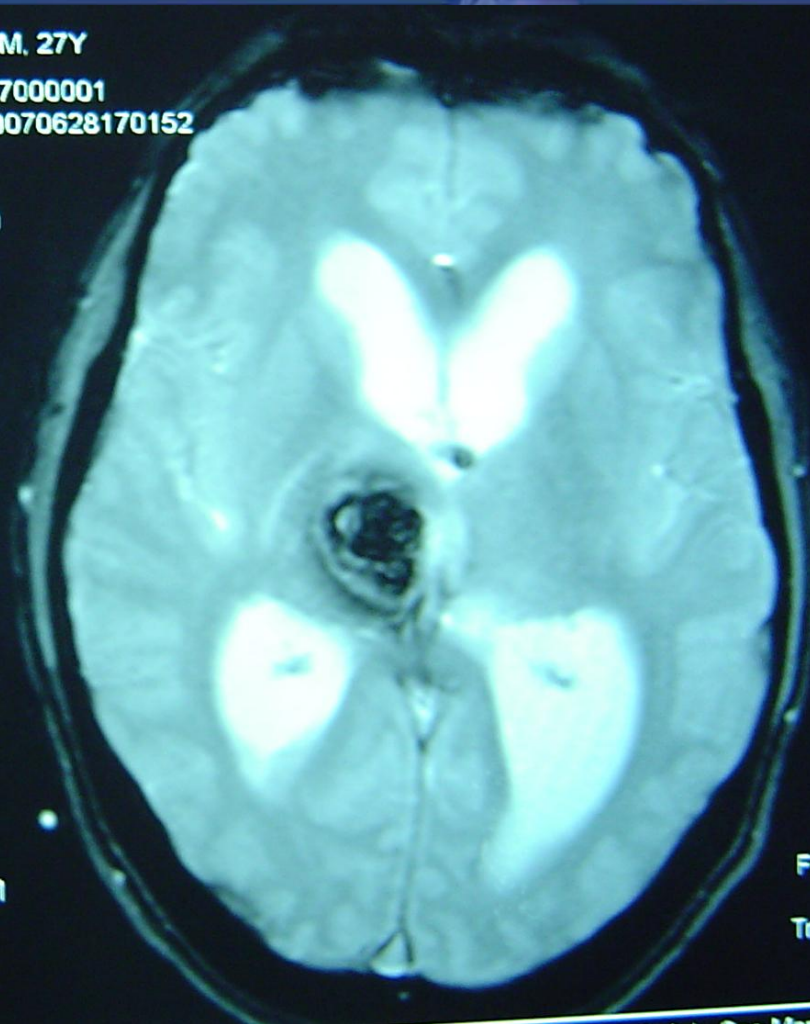


Avanto 573058  
MR B13 \*25/04/1980, M, 27Y  
HFS # 2007049997000001  
+LPH STUDY MR20070628170152  
30024 28/06/2007  
→ 17:40:09  
8 IMA 12 / 20

R

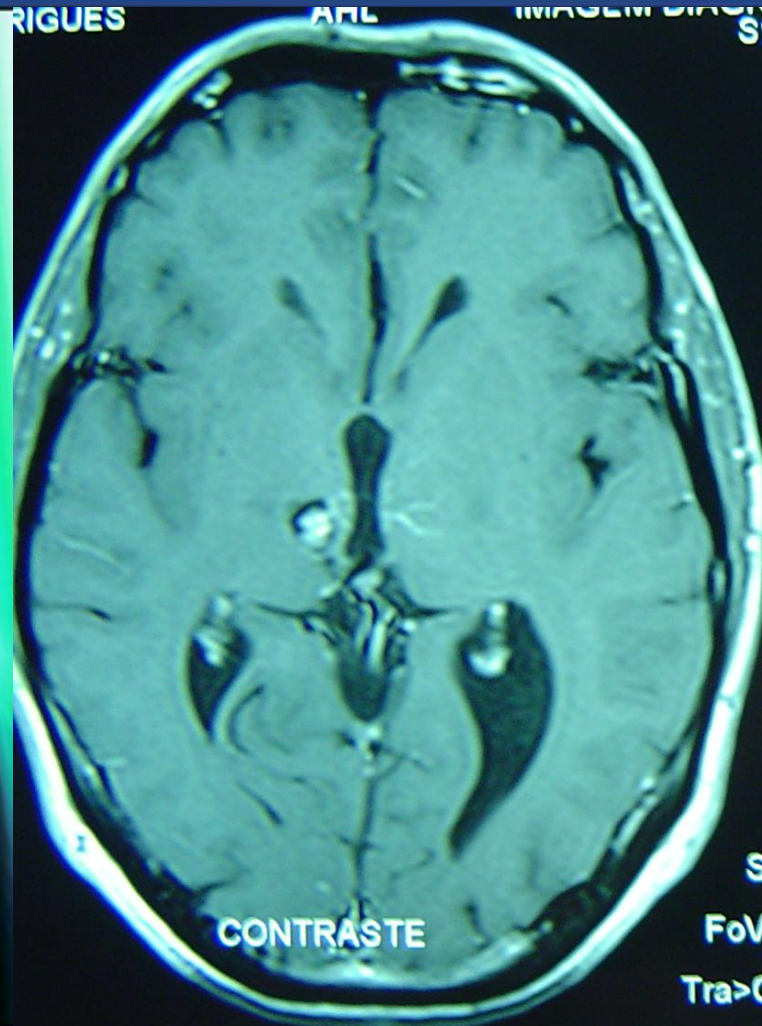
5cm MF 1.13

E TR 800.0  
TP 0 TE 26.0  
SP F4.9 TA 04:29  
SL 5.0 BW 80.0  
FoV 210\*240 M/ND/NORM  
336\*512s I  
Tra>Cor(-7.8) A2  
W 742 C:HE1-4  
250 182:11 / 20





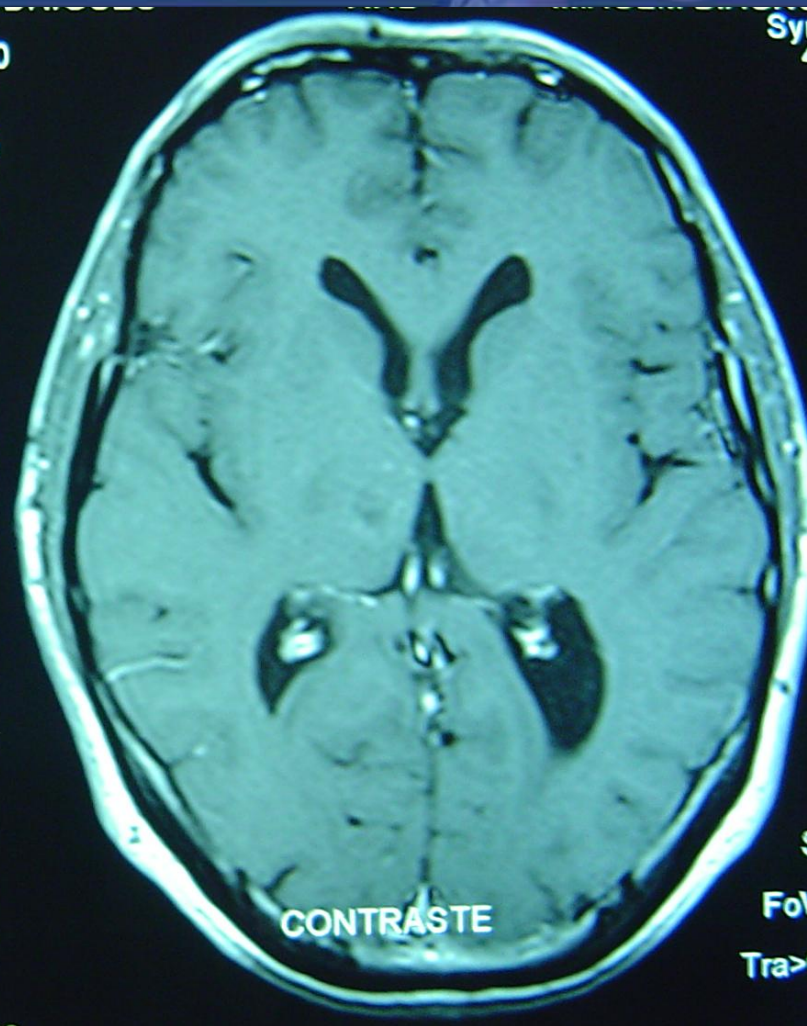
# ♂, 27a, angioma cavernoso



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

RAH

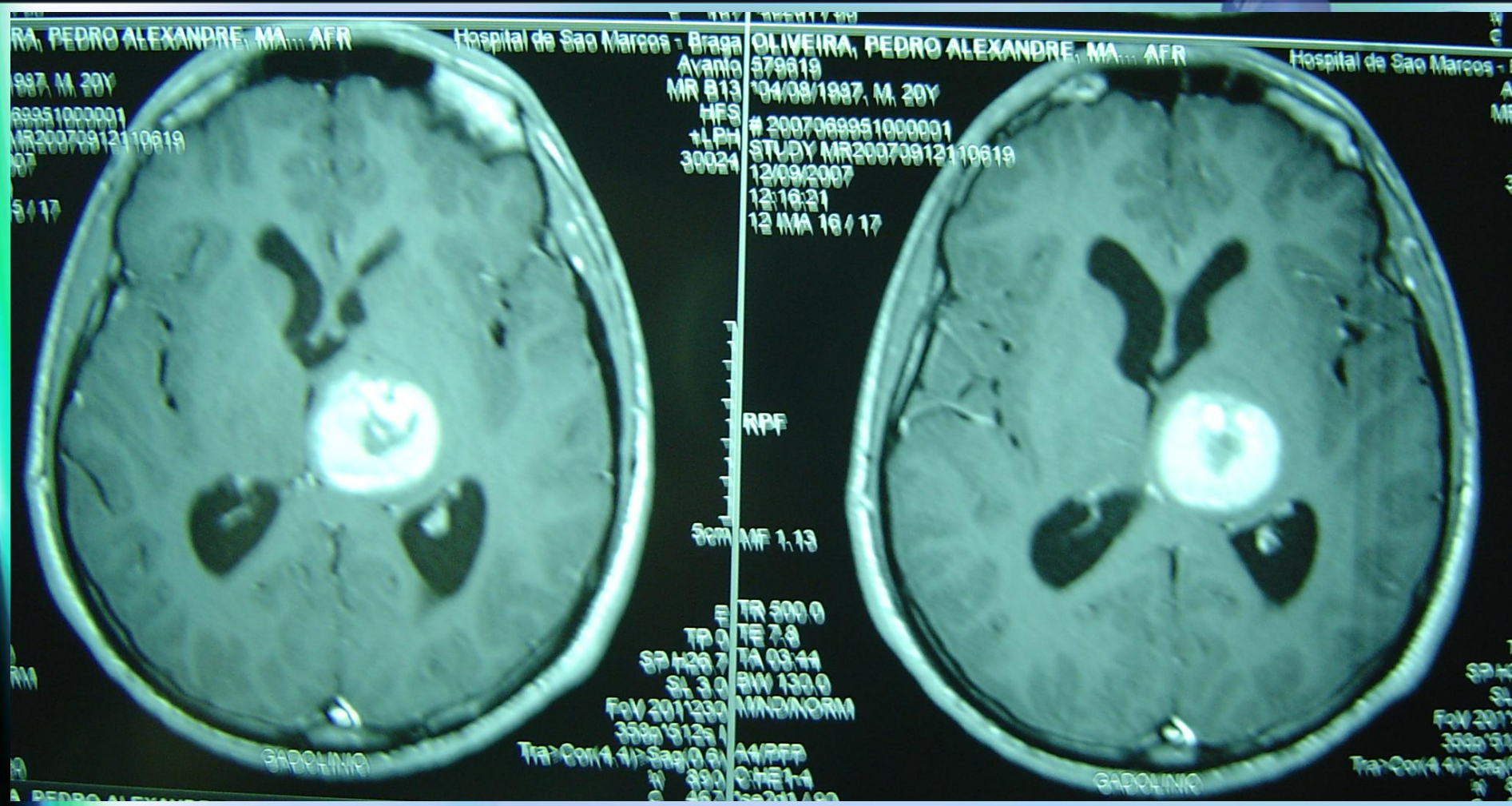
10cm  
I/R  
TP 0  
SP H22.5 TR 459.0  
SL 3.0 TE 15.0  
FoV 236\*270 TA 03:50  
168\*256s M/CV19  
Tra>Cor(-11,3)  
W 794 A3



FoV  
Tra>

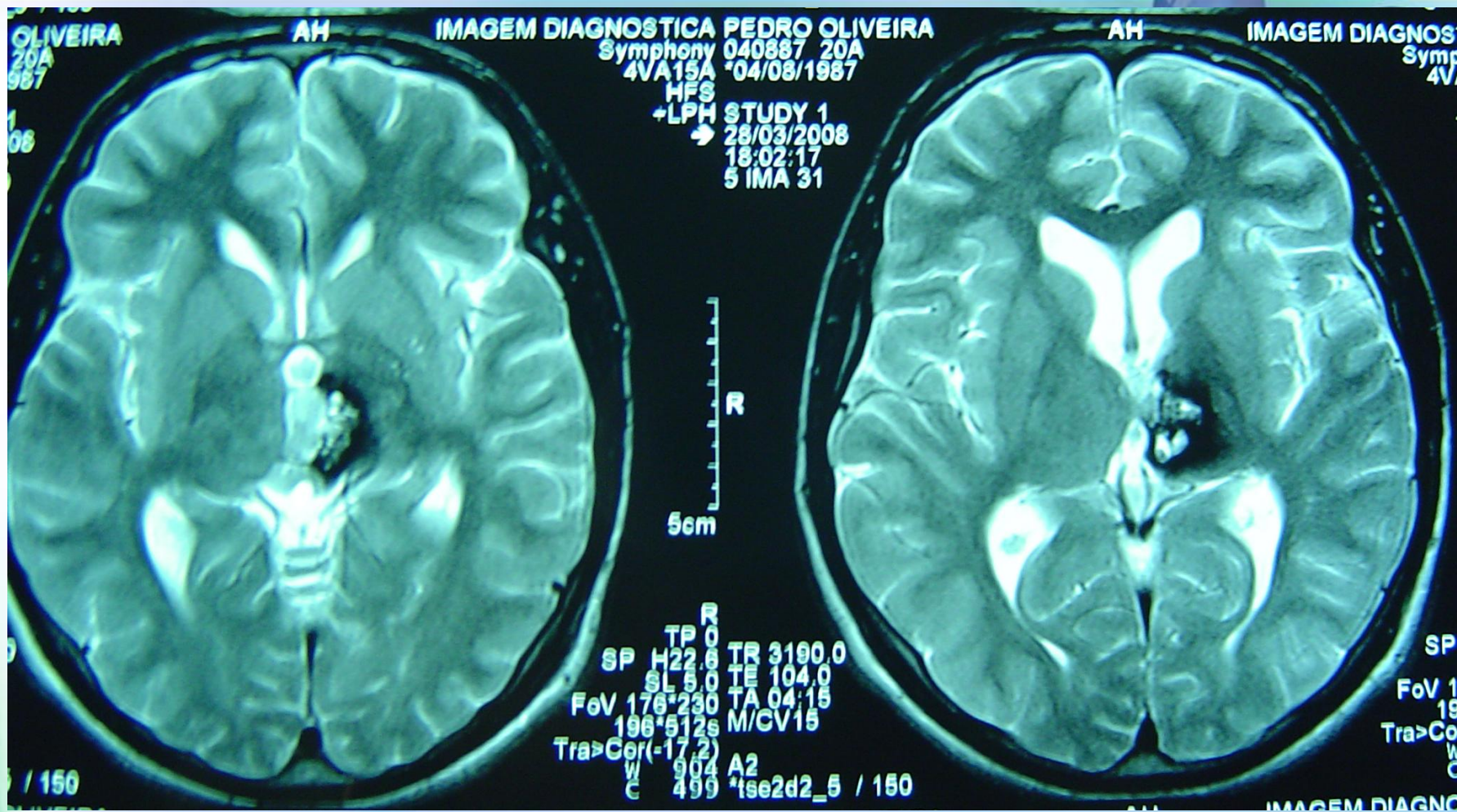


# ♂, 20 a, angioma cavernoso

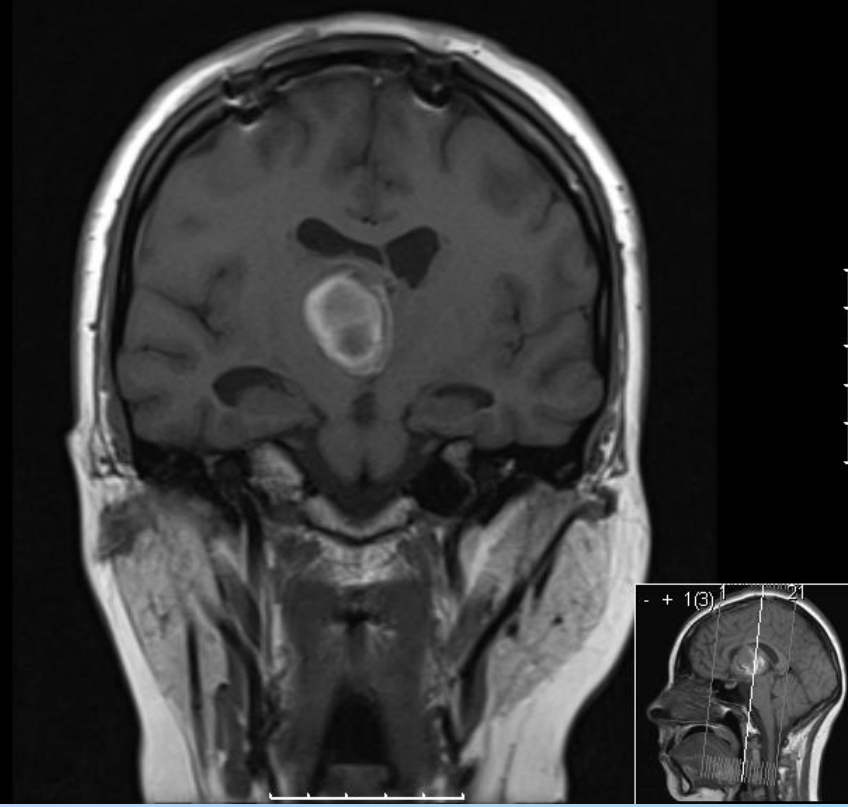
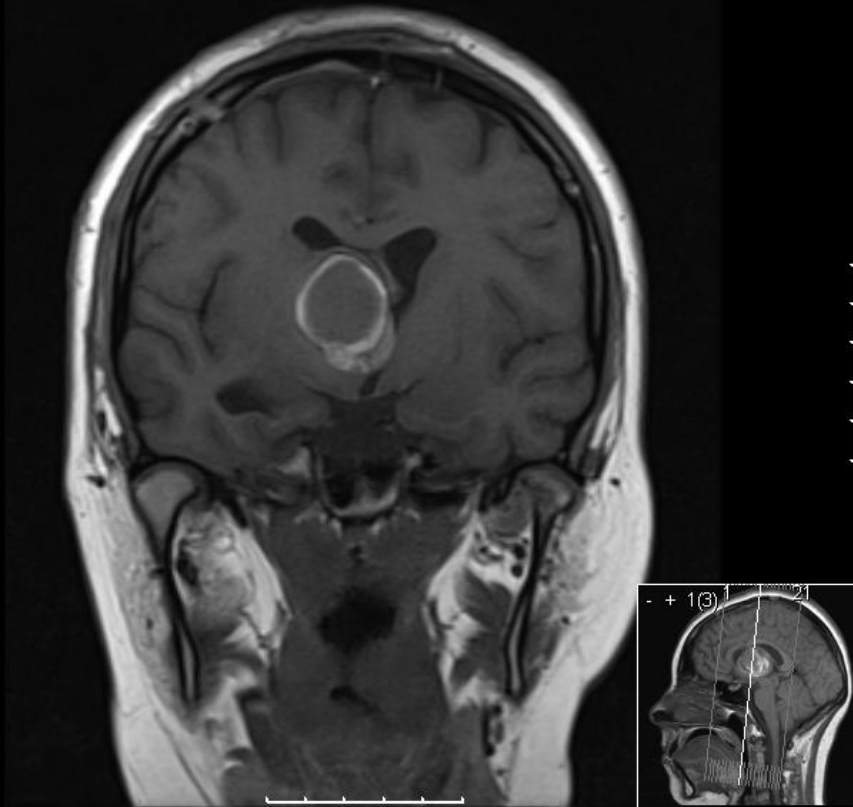
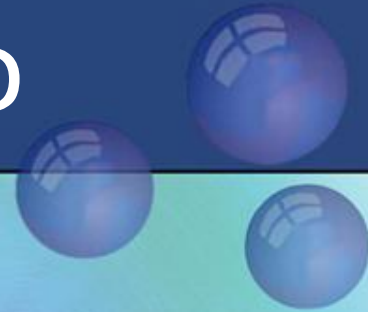




# ♂, 20 a, angioma cavernoso

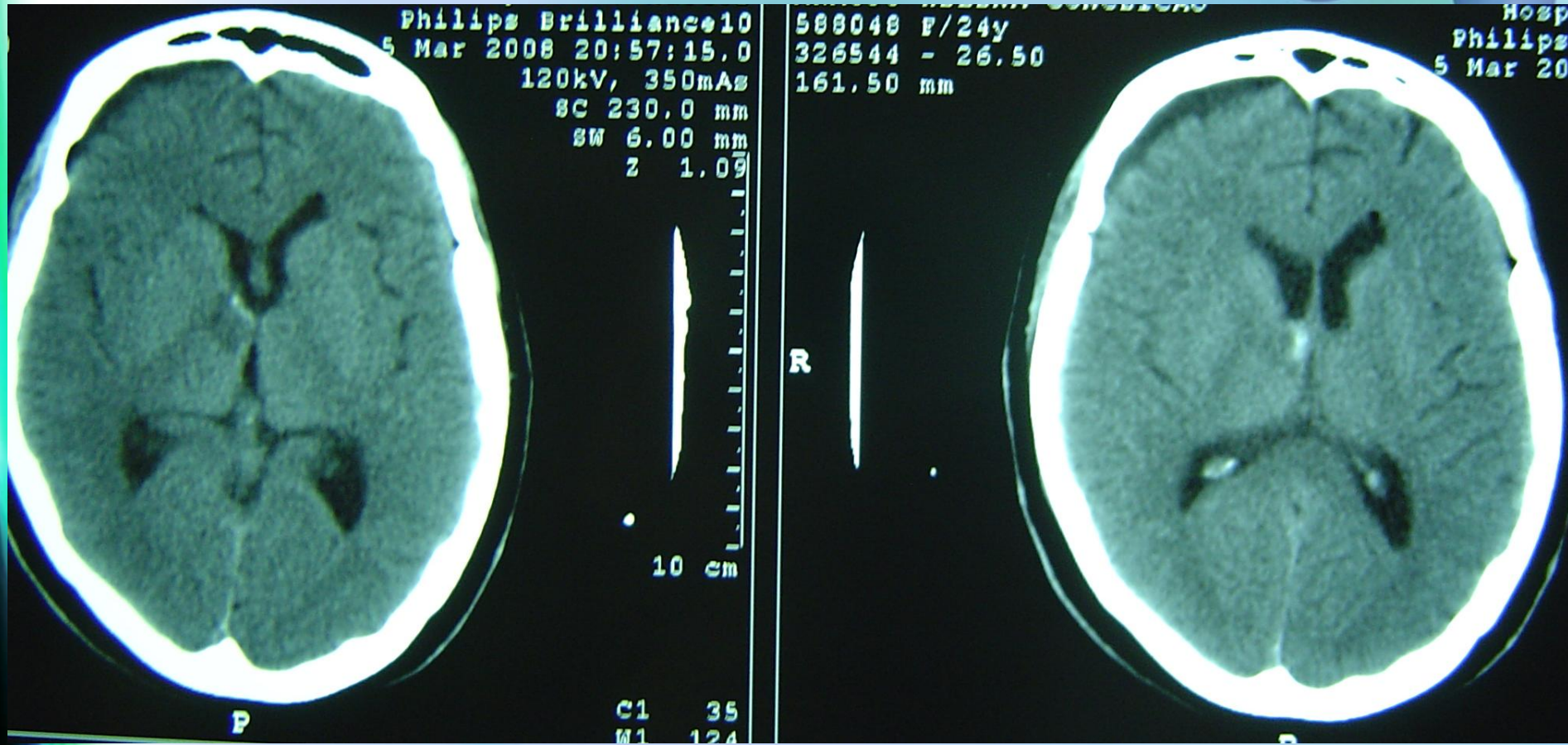


# ♀, 24a, angioma cavernoso





# ♀, 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

