

Intraparenchymalis tumorok sebészete

Attributumok

Terminológia

Glioma-sebészet dilemmája

Attributumok és alkalmazott
módszereink

Intraparenchymalis tumorok sebészetében használt attributumok

Terminológia

intraaxial [ENG]

intraparenchymal:

állományon belül

állományi

Intraparenchymalis tumorok

Glioma-sebészeti dilemmája

Guidelines on management of low-grade gliomas: report of an EFNS–EANO Task Force

- R. Soffietti, H. Duffau, et al
- The scientific evidence of papers collected from the literature was evaluated and graded according to EFNS guidelines, and recommendations were given accordingly.

Guidelines on management of gliomas

Total/near total resection can improve seizure control, progression-free and overall survival, whilst reducing the risk of malignant transformation.

Intraparenchymalis tumorok sebészetének dilemmái

Elvárás: olyan maximalis gross total removal, amely nem okoz tartós szignifikáns életminőség-romlást

Kulcsszavak: tumor-megkülönböztetés
radikalitás / agy (funkció) kimélet

Intraparenchymalis tumorok sebészetében használt attributumok

A tumor

A környező agy

Az intracranium

A beteg

Intraparenchymalis tumorok meghatározó jellemzői

Szövettani/Biológiai indulat

Konzisztencia

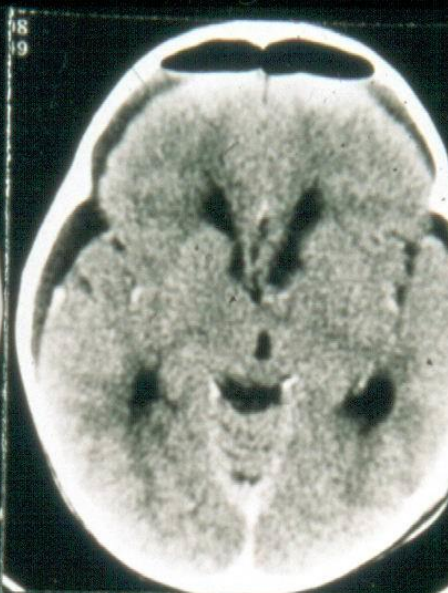
Erezettség, keringés

Lokalizáció [multifocalis?]

Szín

Méret

[Recidiva-Residuum]



preop

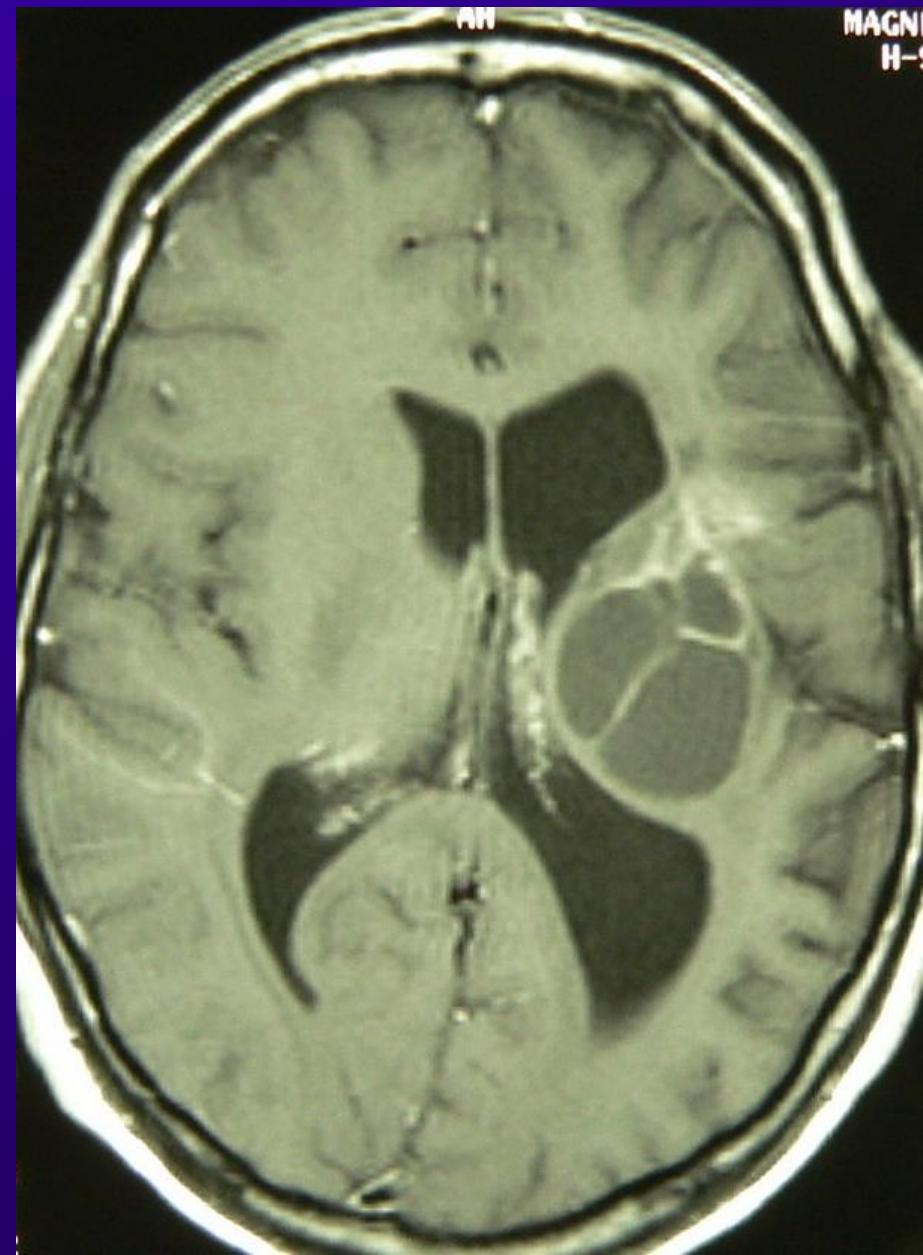
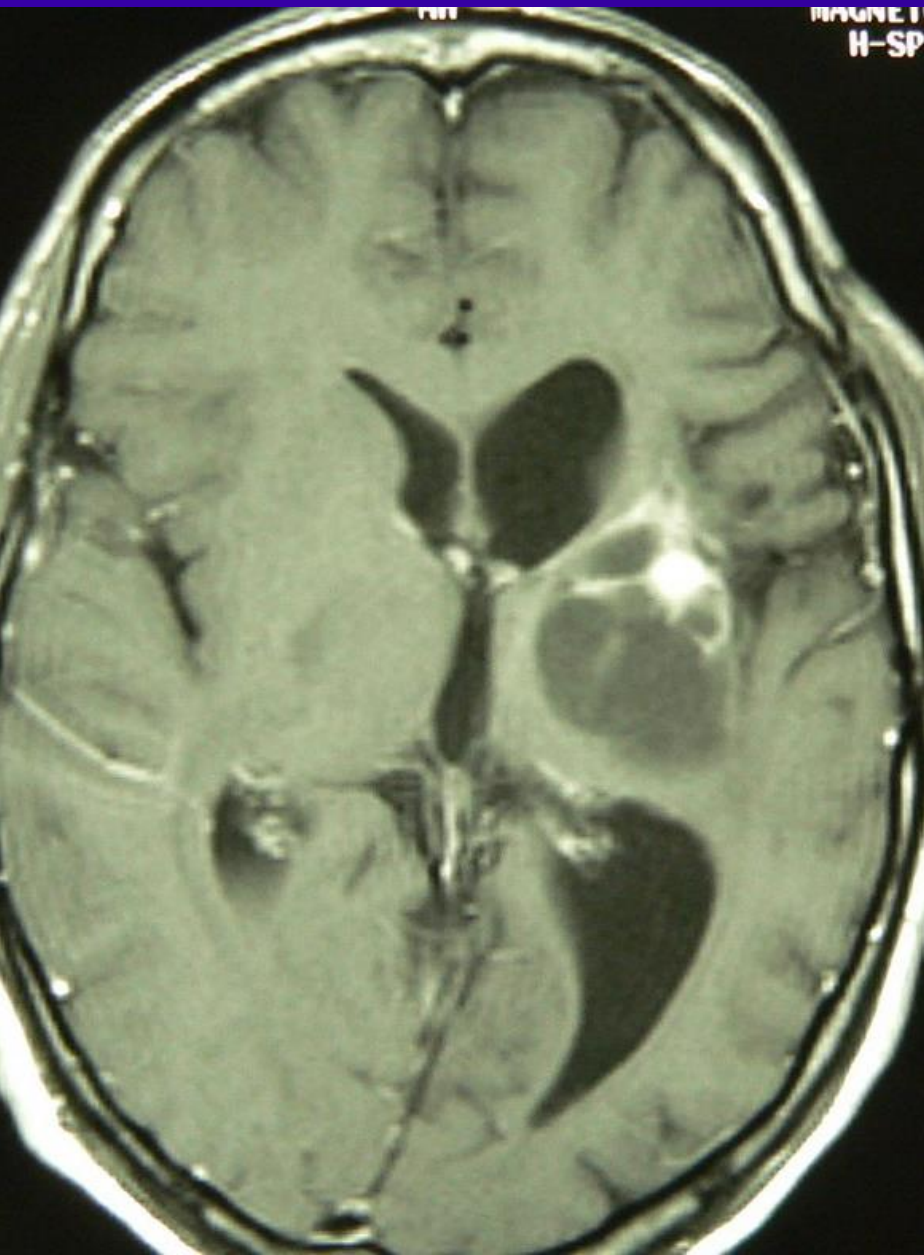
Postop

preop

Postop

Bal intraventr E2

Cystic Pilocytic A1



Intraparenchymalis tumorok attributumai

Konzisztencia

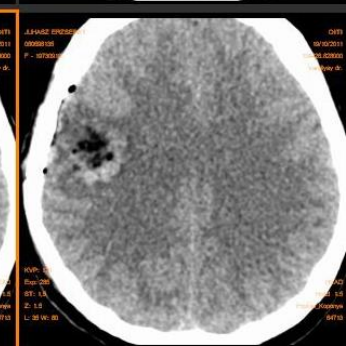
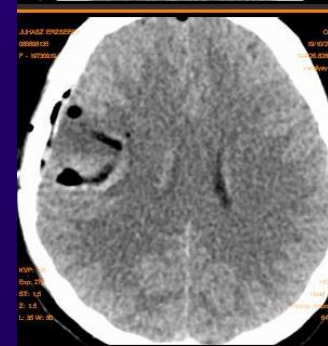
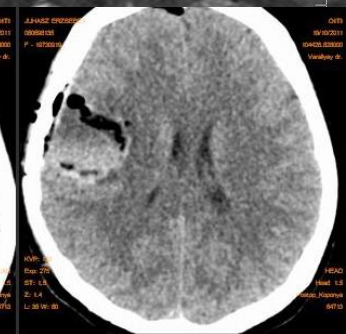
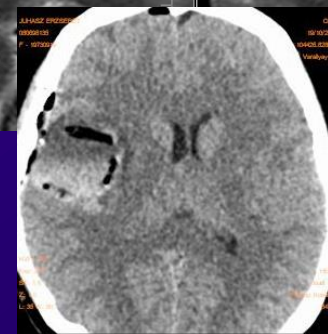
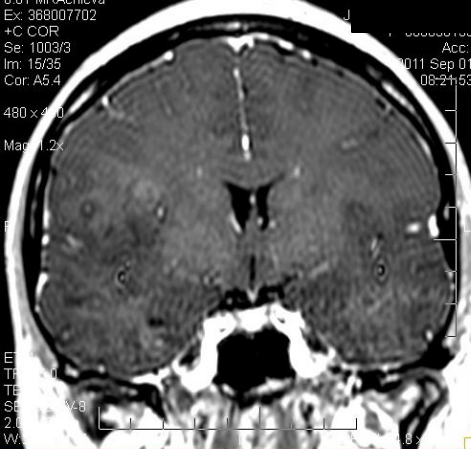
állag - törékenység

szívhatóság

cysták, necrosisok

bevérzés

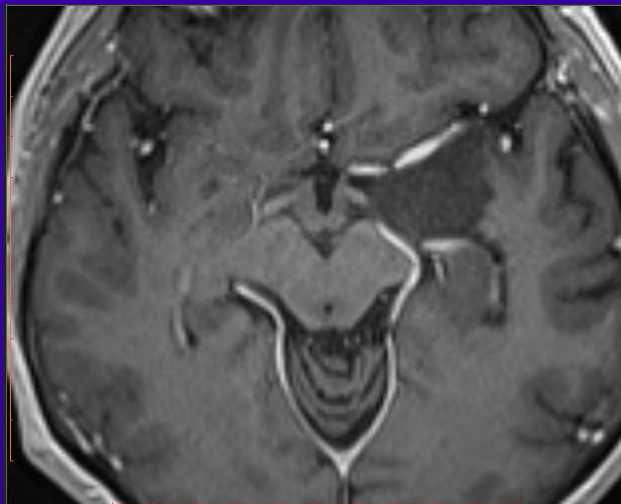
multi-type



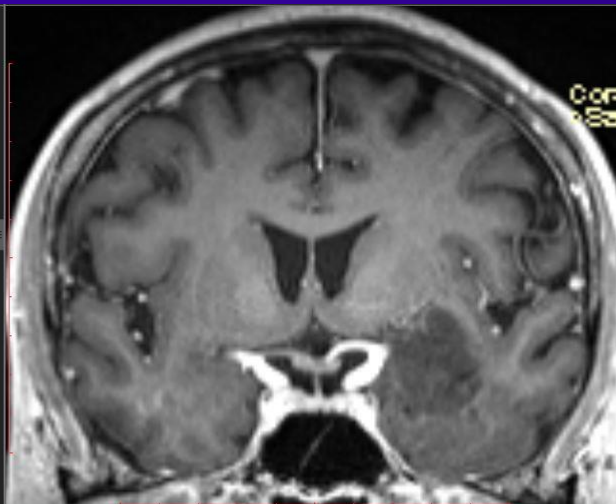


Intraparenchymalis tumorok attributumai

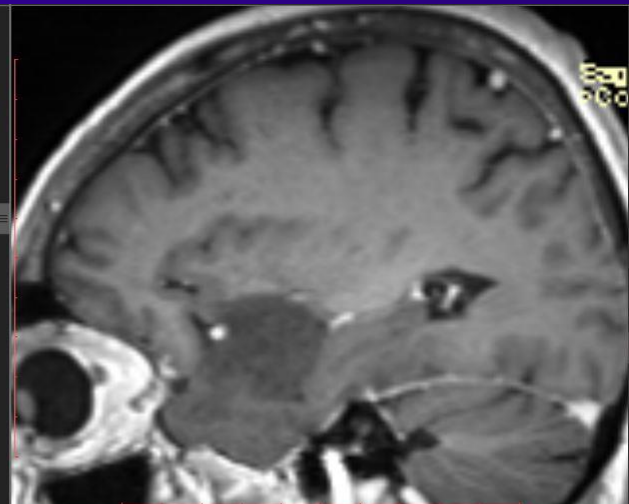
Erezettség, keringés
kontraszt-halmozás



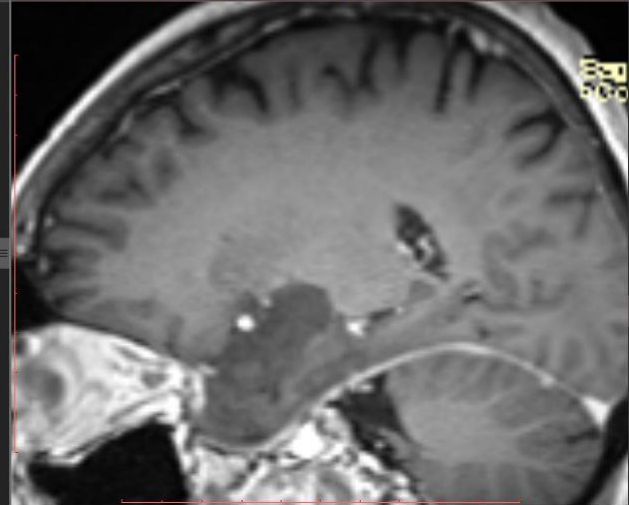
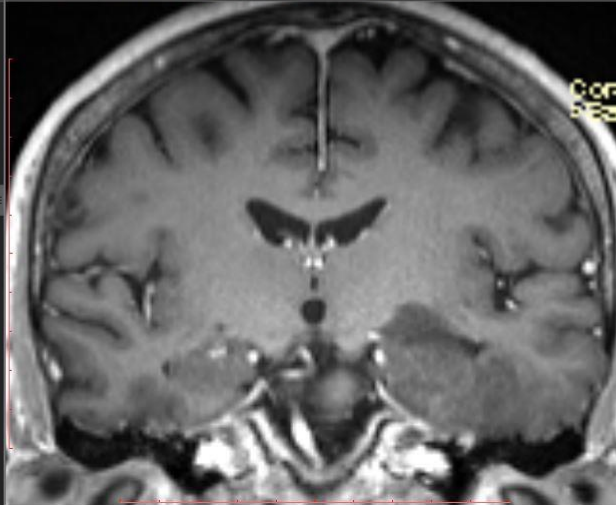
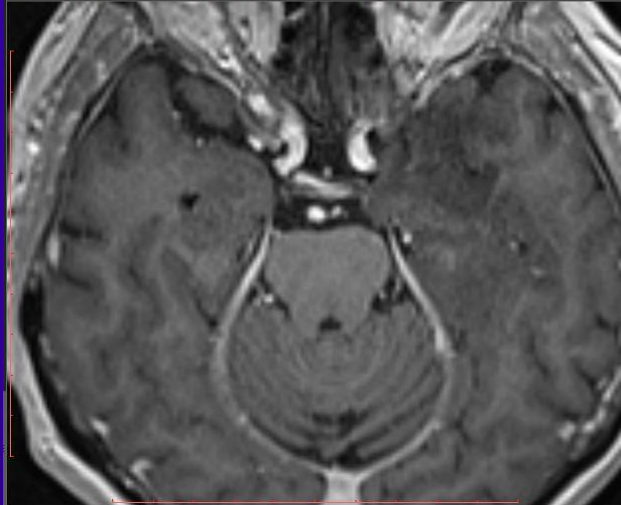
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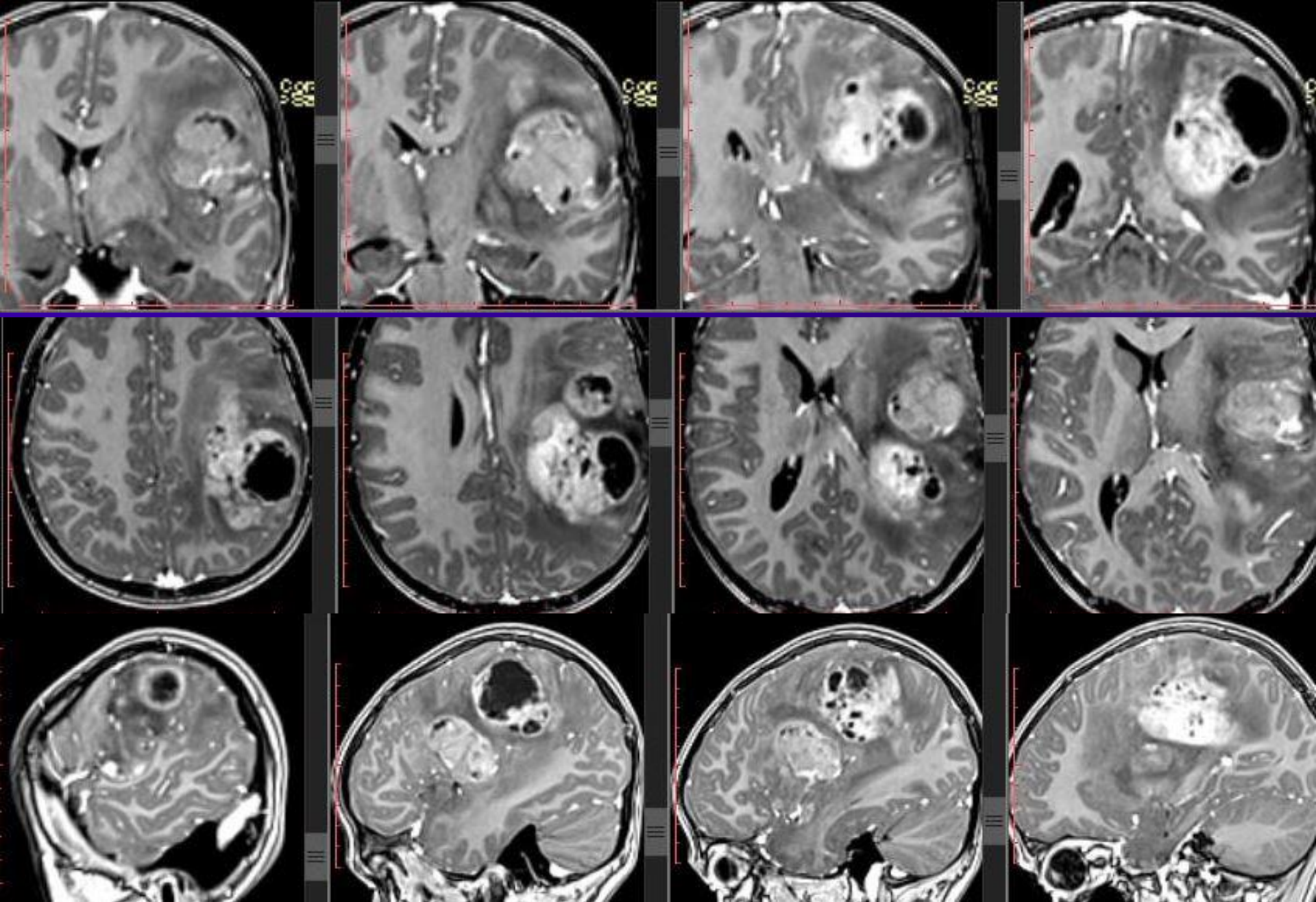


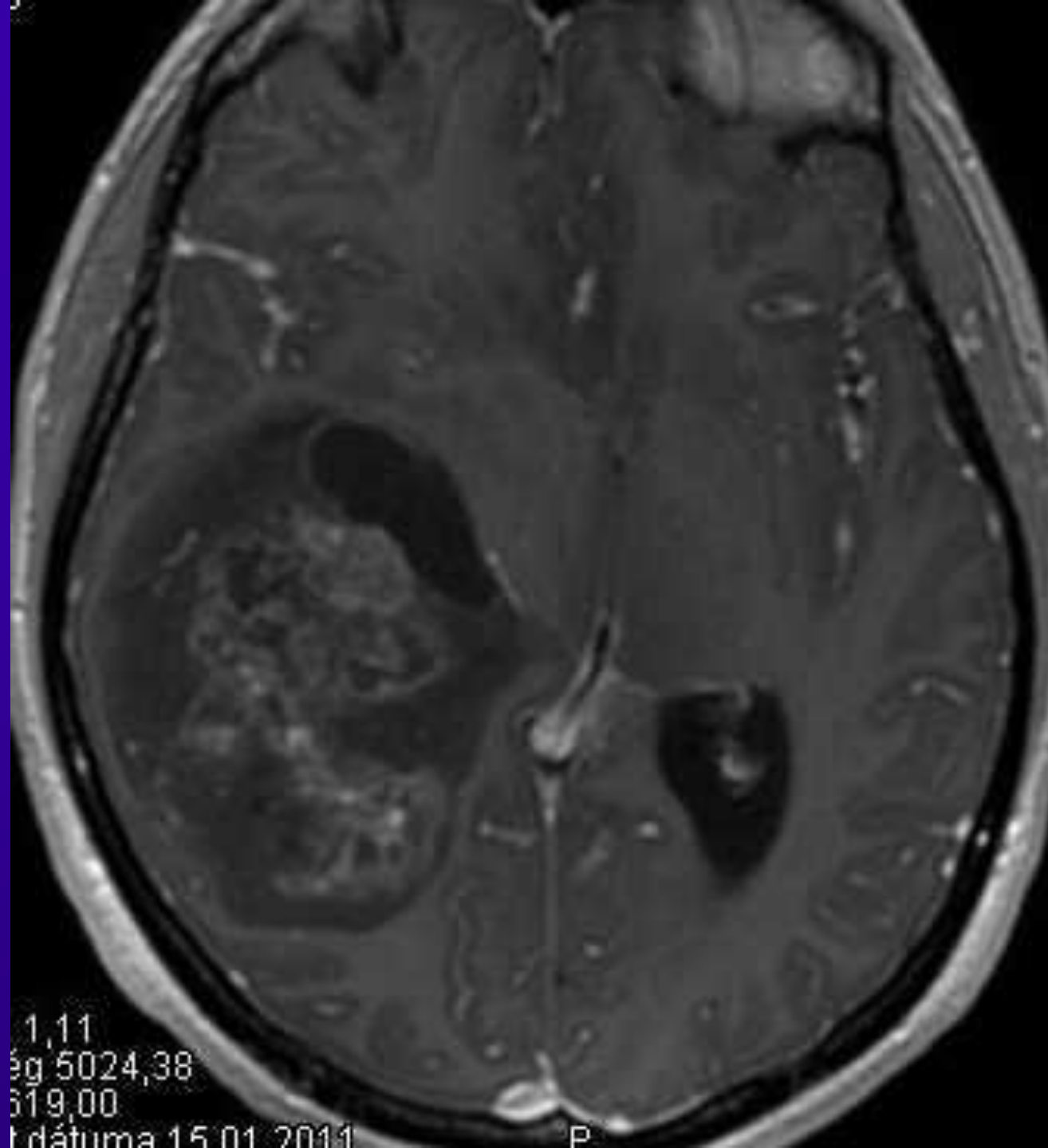
DEAK BOLDIZSARNE (71y) - 8/11/2019 12:54:38 PM - COR T1 K.A



DEAK BOLDIZSARNE (71y) - 8/11/2019 12:54:38 PM - SAG T1 K.A







1,11

ég 5024,38

619,00

t dátuma 15.01.2011

P

Intraparenchymalis tumorok attributumai

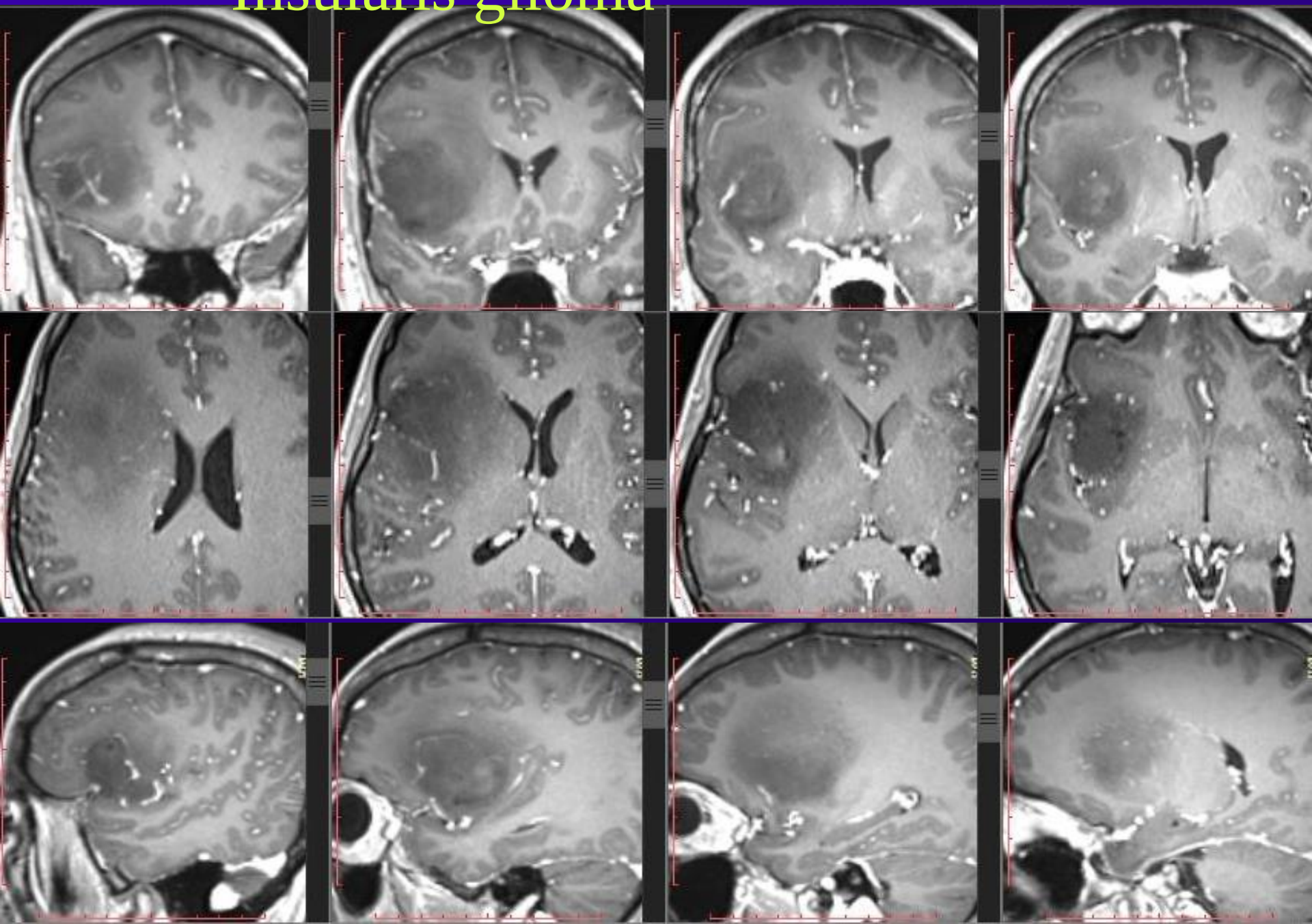
Lokalizáció

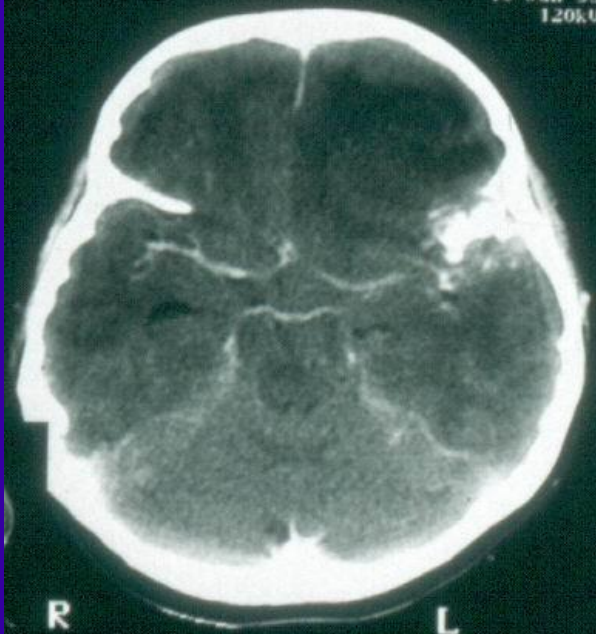
surface representation

eloquence

compact -/-multifocal

Insularis glioma





10 Jun 93 11:27:29
120kV, 400mAs
SC 240mm
SH 5.0mm
ST 2.0s
Z 1.33

47959
18436-31
114.8 mm
C



ELSCINT
10 Jun 93
120kV

R

L

CI 43
HI 102

R

L



INTERNATIONAL MEDICAL CENTER

ELSCINT 2400 elite
10 Jun 93 11:27:51
120kV, 400mAs
SC 240mm
SH 5.0mm
ST 2.0s
Z 1.33

47959
18436-35
134.7 mm
C

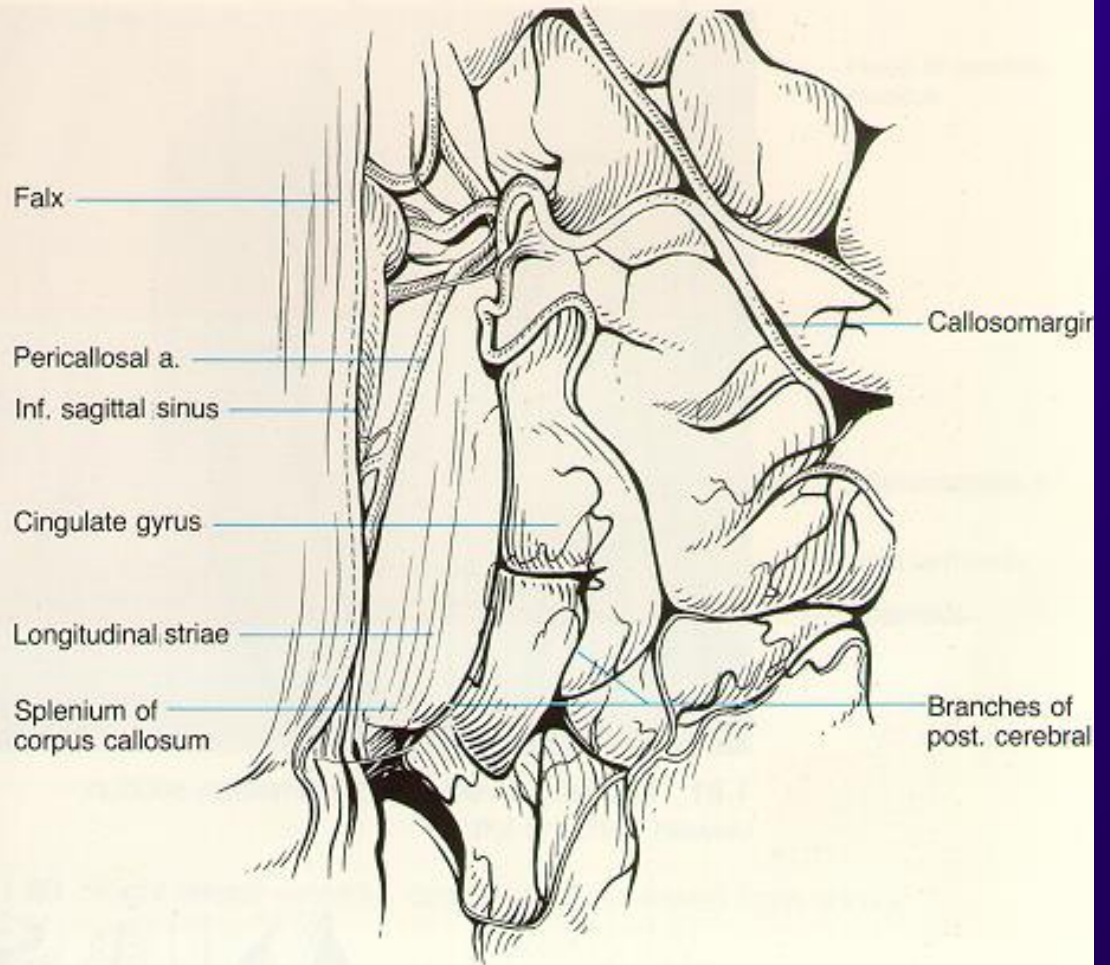


INTERNATIONAL MEDICAL CENTER

ELSCINT
10 Jun 93
120kV

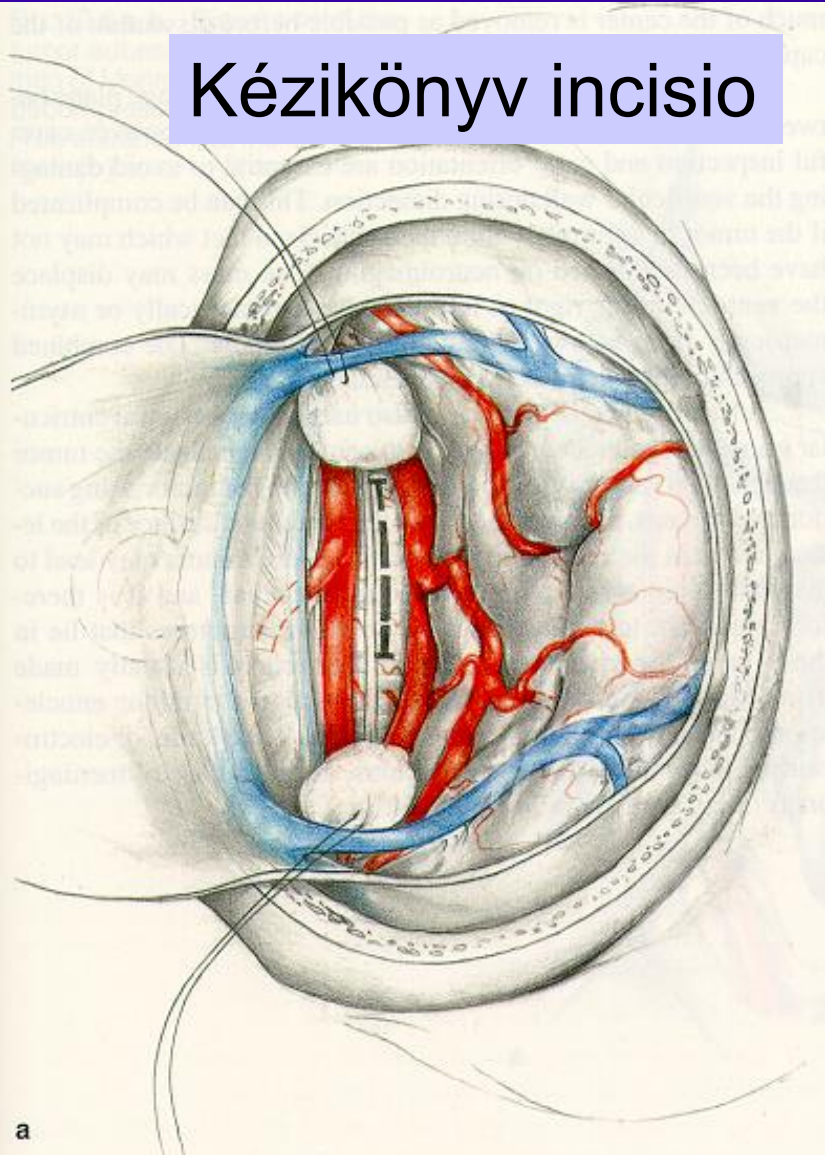
CI 43
HI 102

Transcallosalis feltárás



Transcallosalis

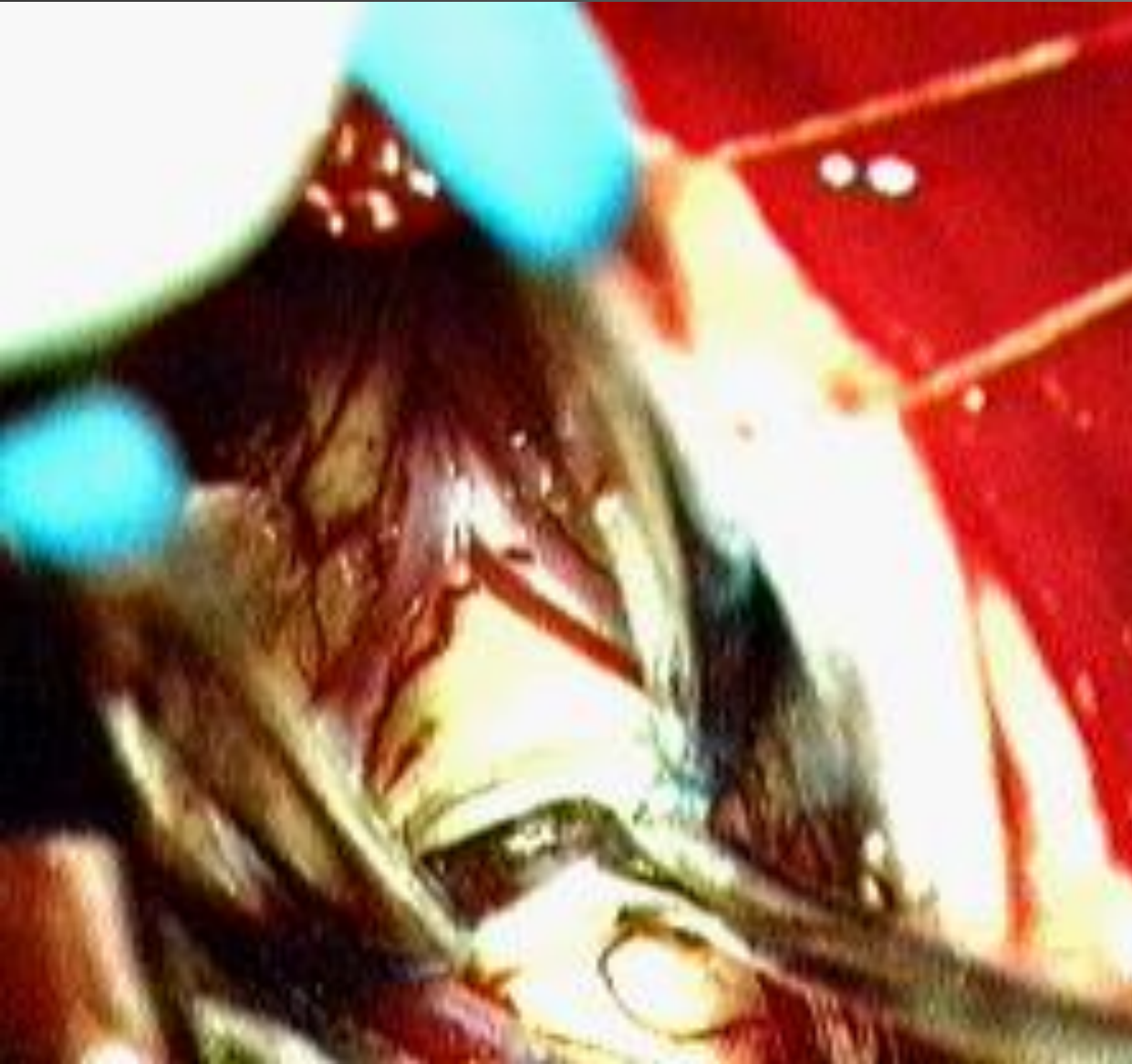
Kézikönyv incisio



A mi incisiónk

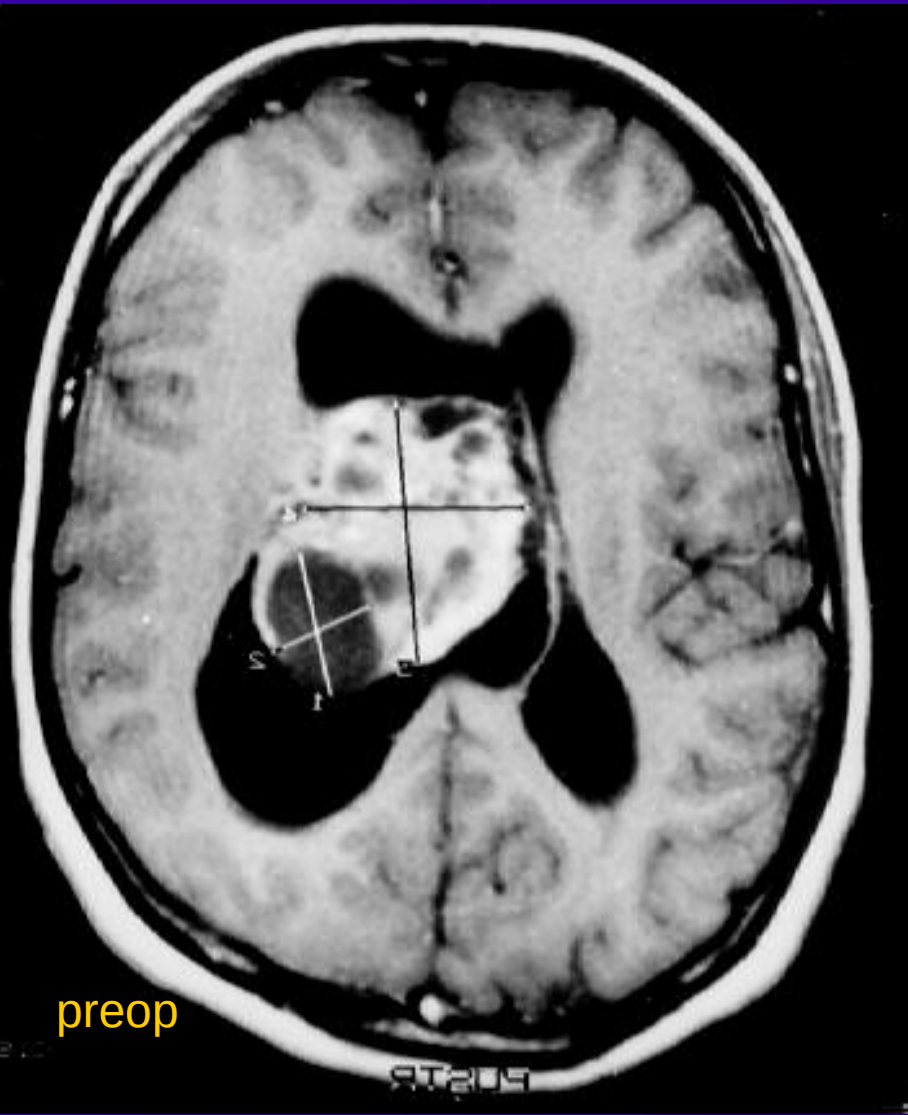


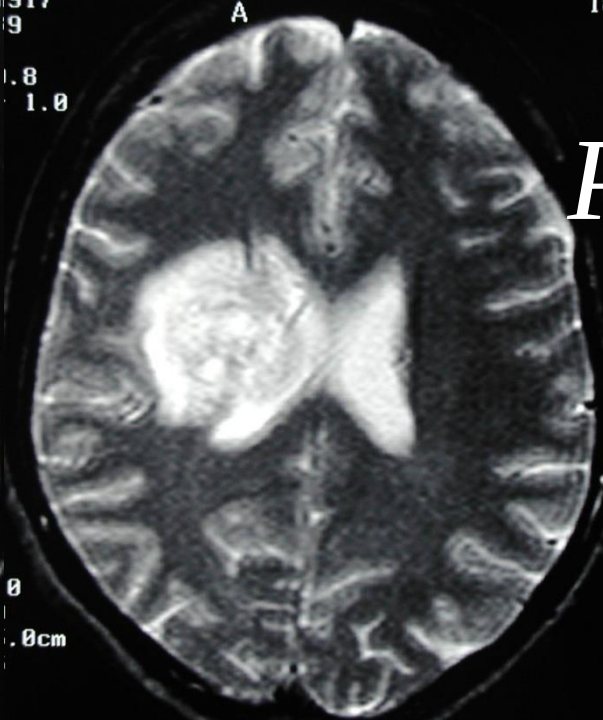
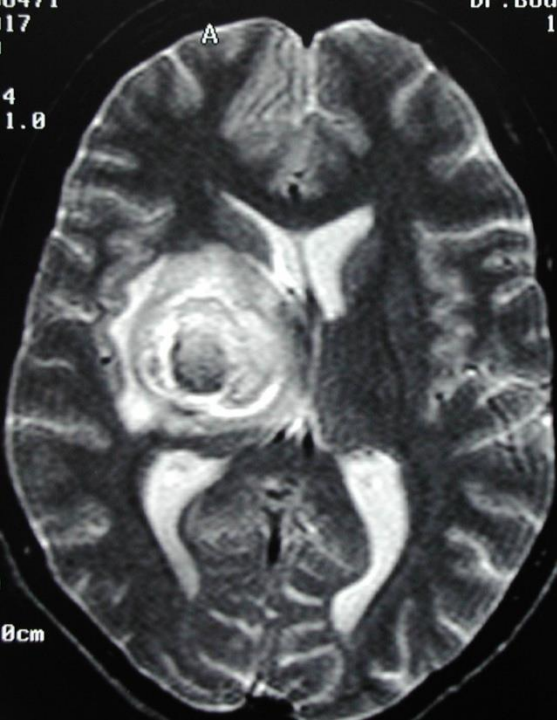
Corpus callosum incisio



Rostokkal parallel

Centralis neurocytoma 30é

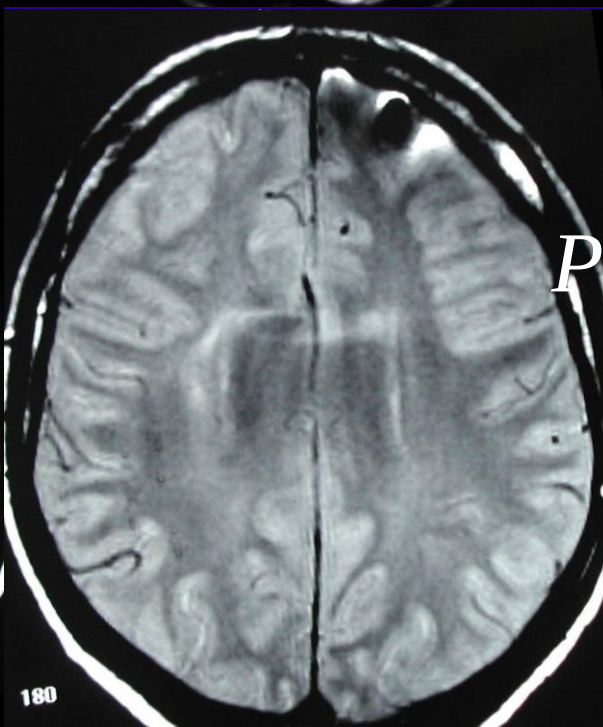
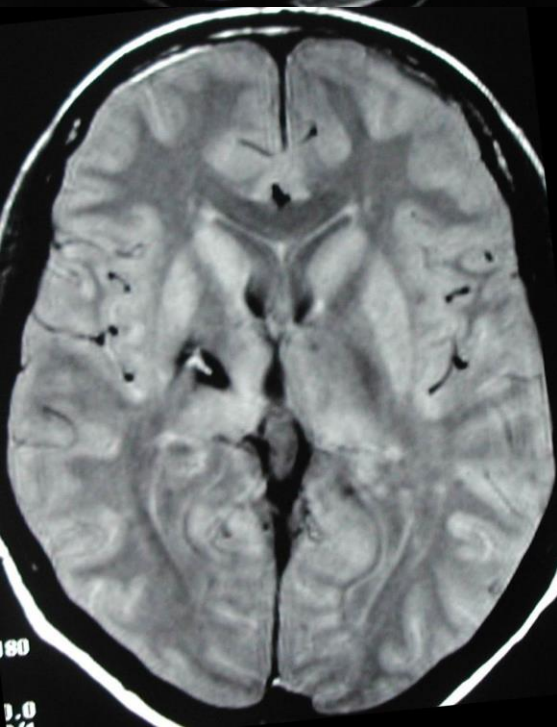
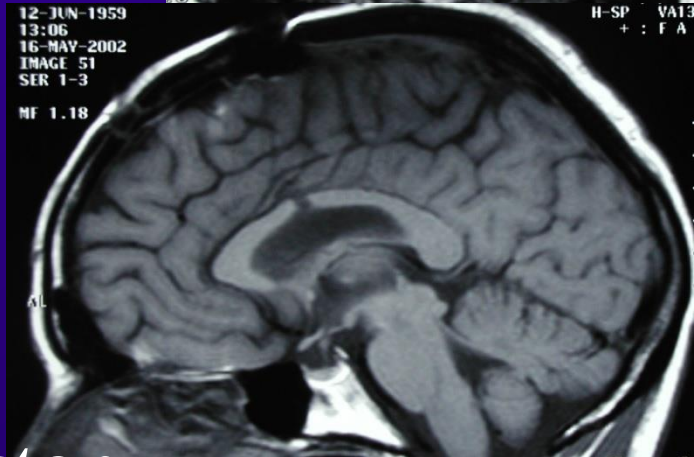




Preop

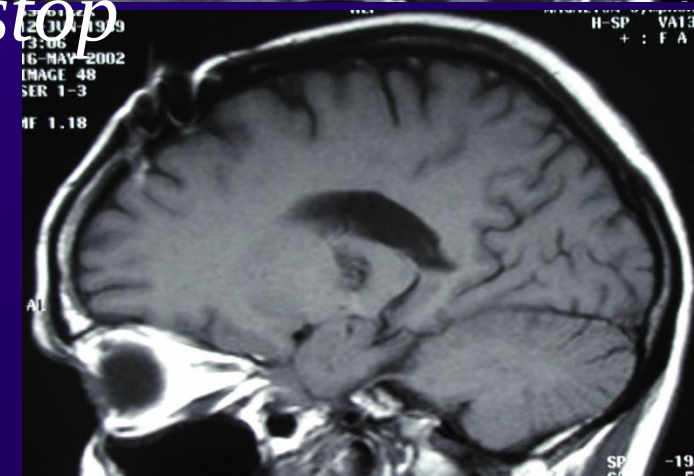


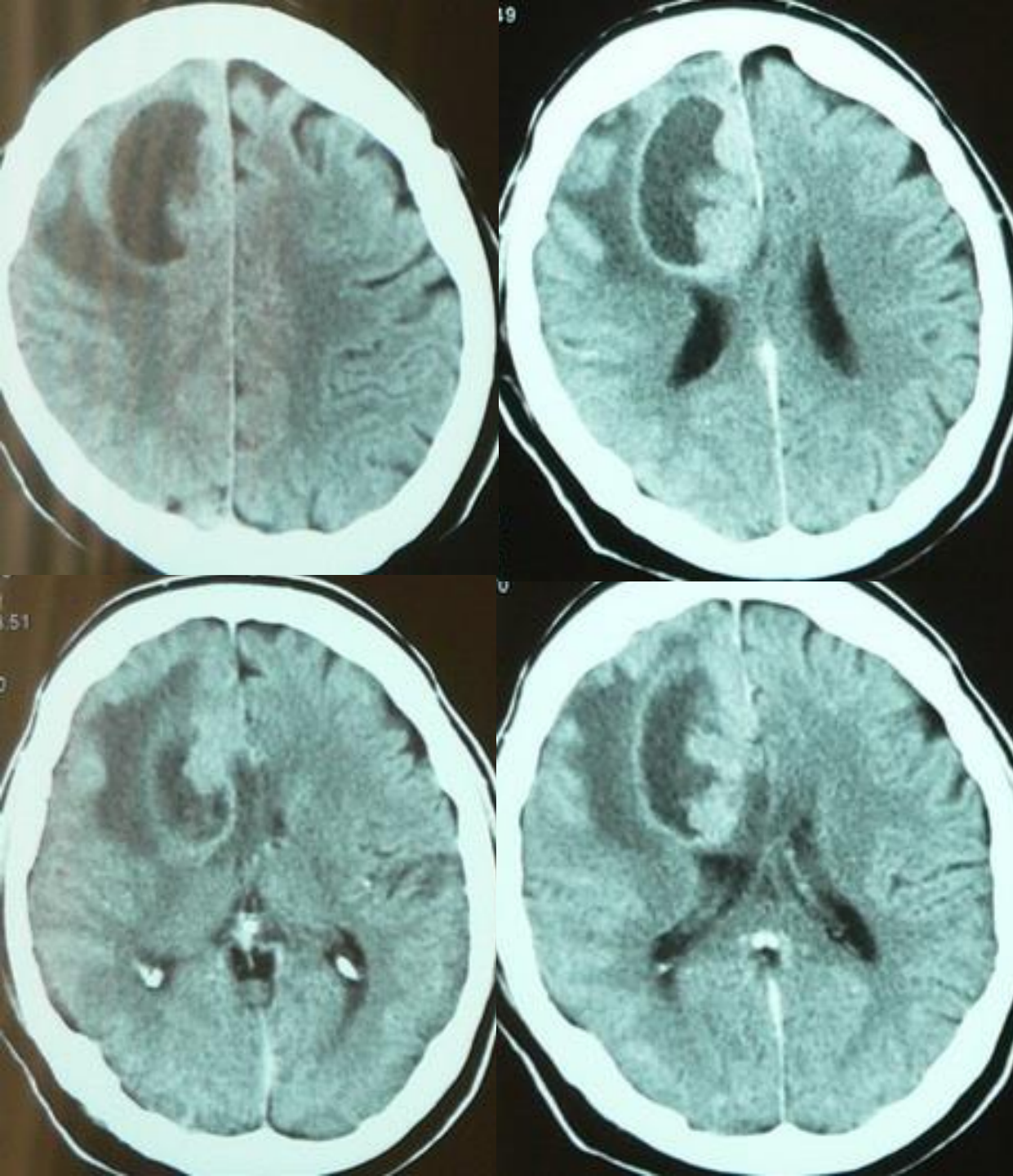
12-JUN-1959
13:06
16-MAY-2002
IMAGE 51
SER 1-3
MF 1.18



Postop

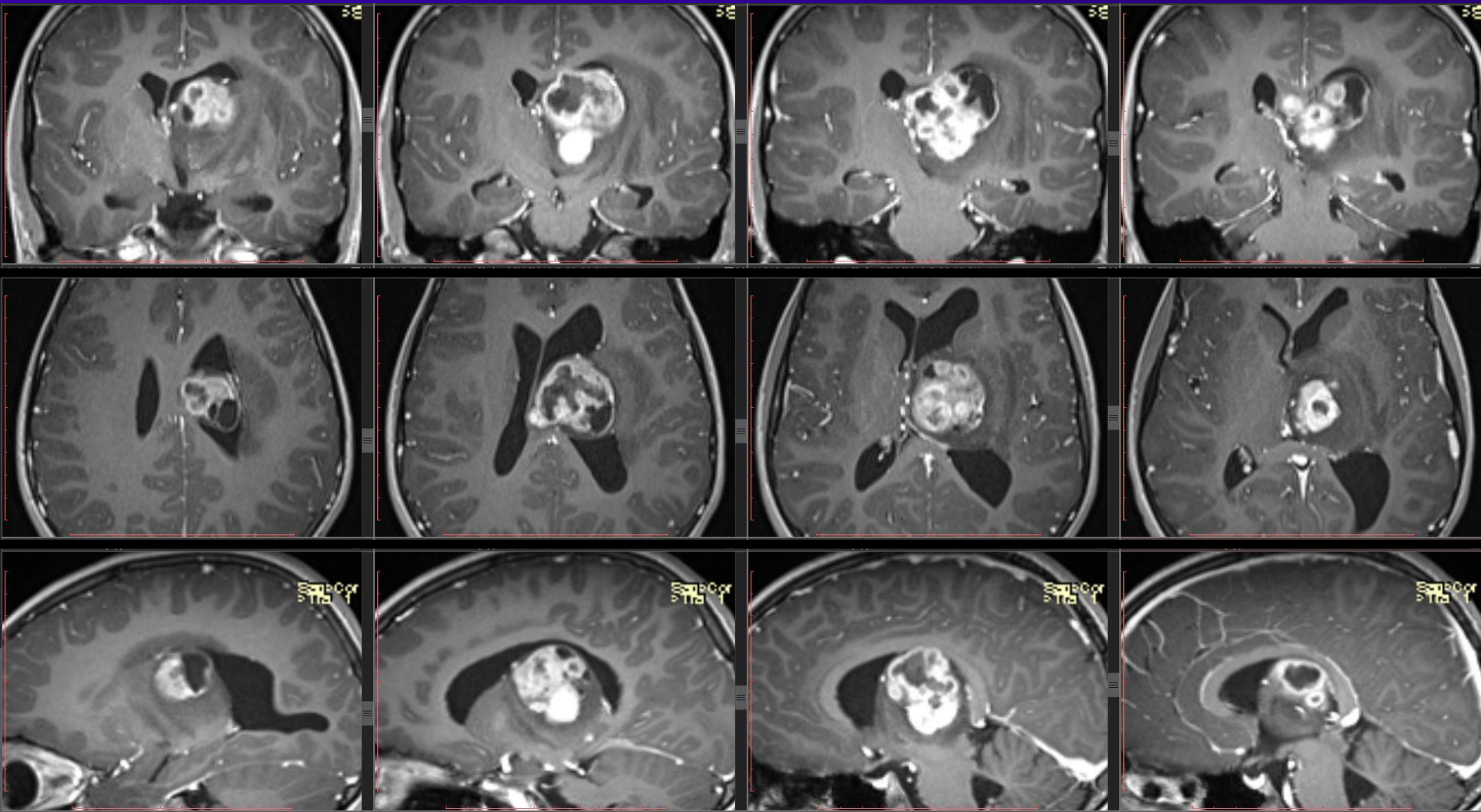
12-JUN-1959
13:06
16-MAY-2002
IMAGE 48
SER 1-3
MF 1.18





Cingulum
tumor

*Választható feltárások:
(inhomogen, szívható, lateralis cleavage?)
ellenoldal?*



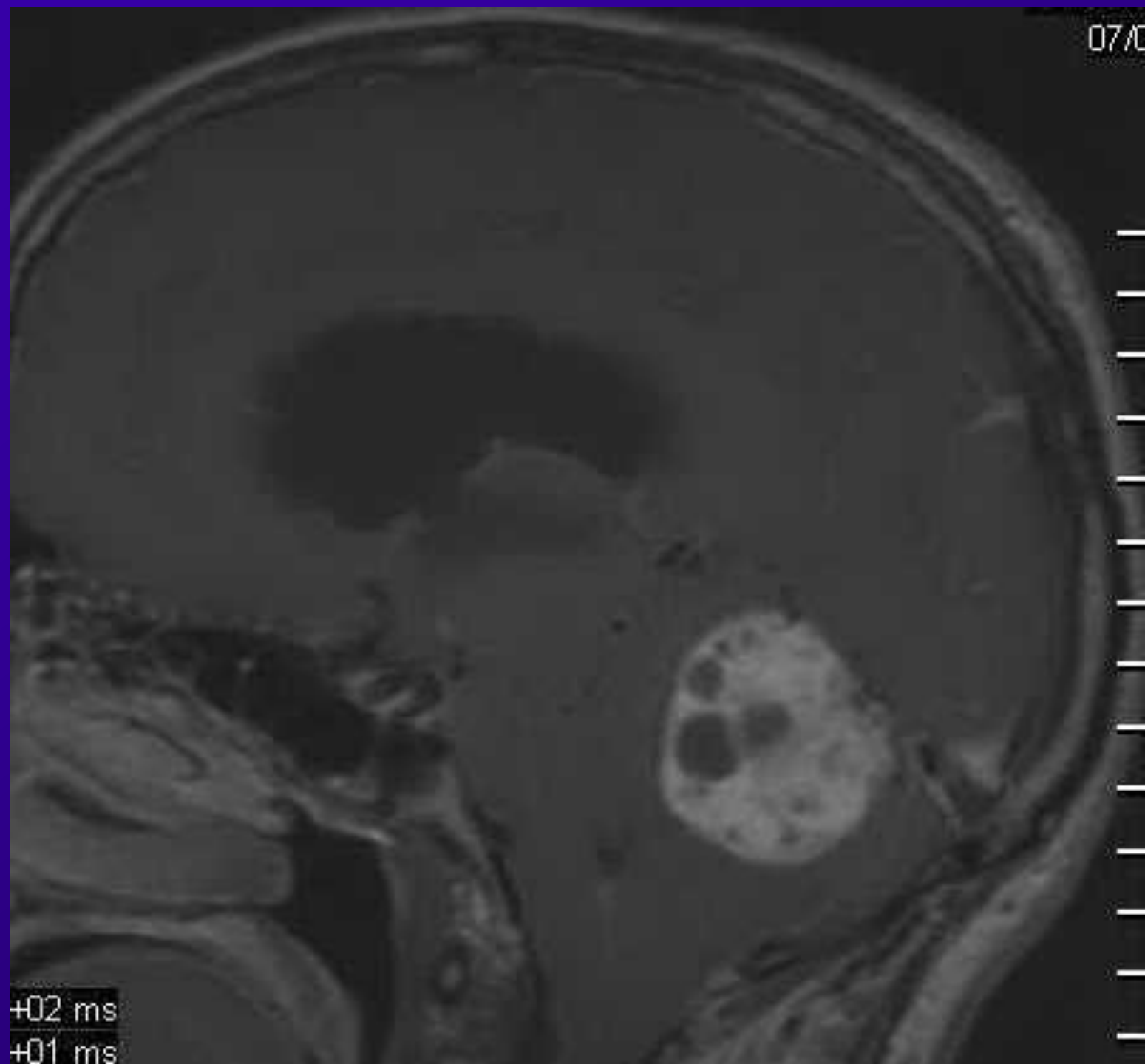
Honnan?



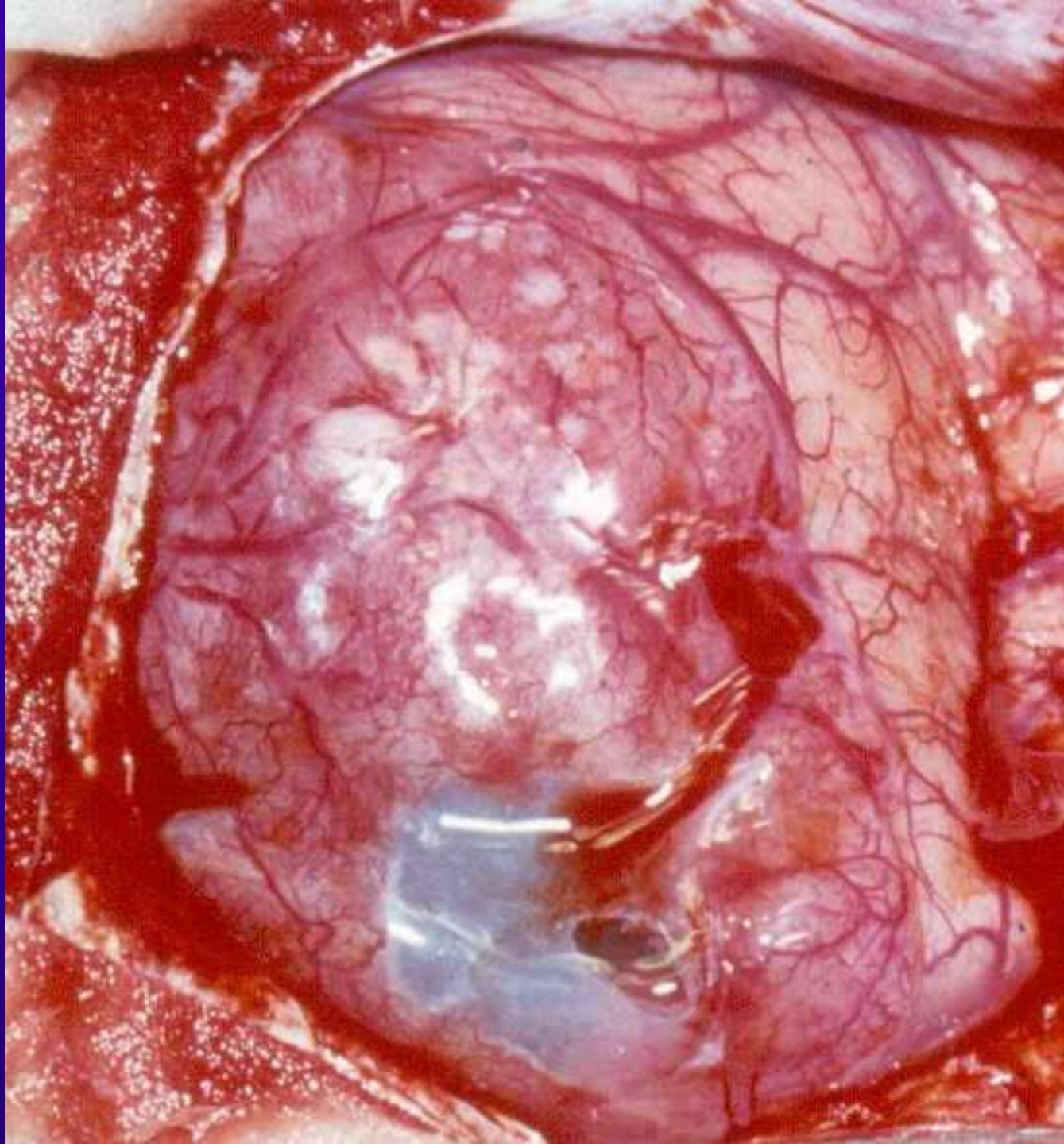
Eloquencia?



Határok

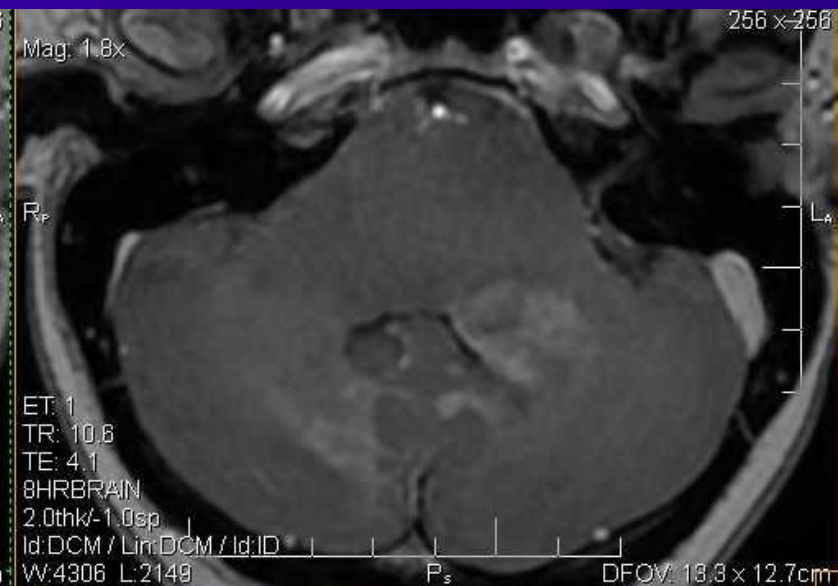
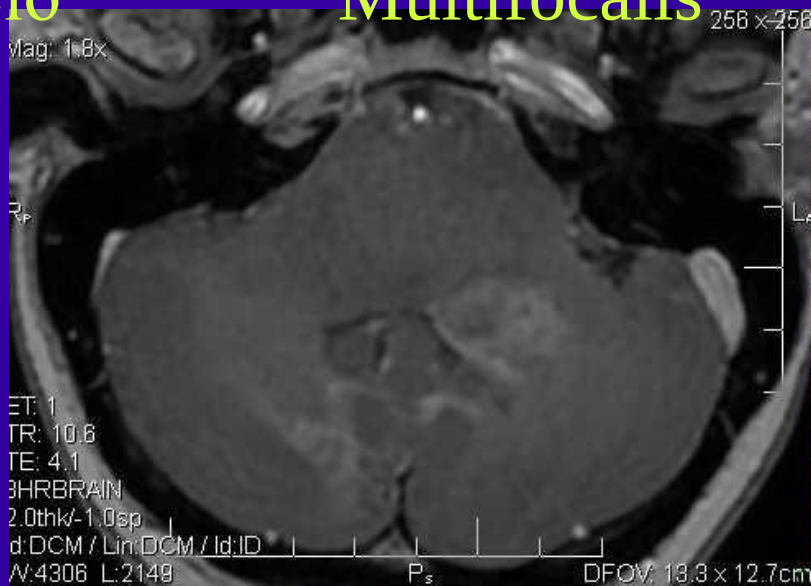


Gyralis



Infiltráció

Multifocalis



Intraparenchymalis tumorok attributumai

Szín

ependymoma, epidermoid -/-

A2

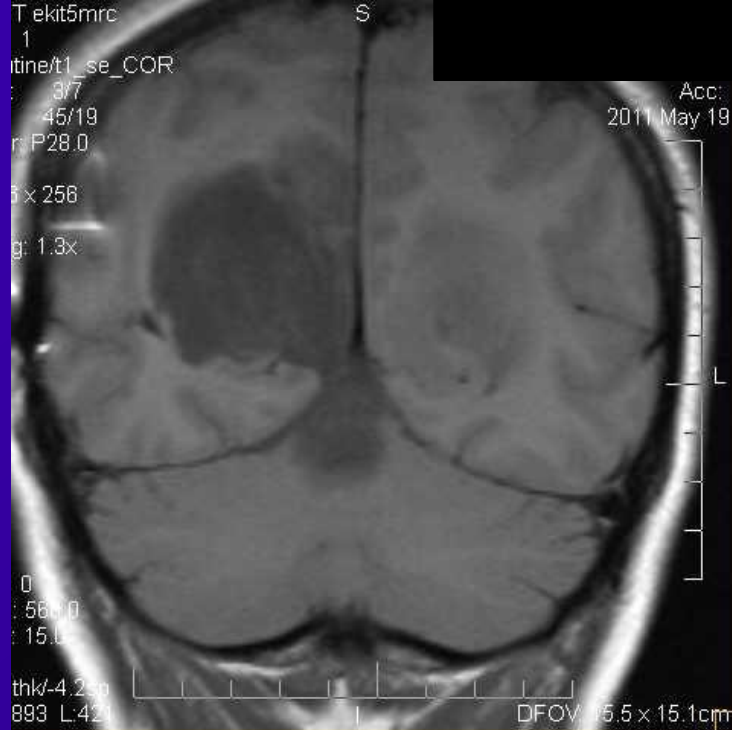
fluorescein

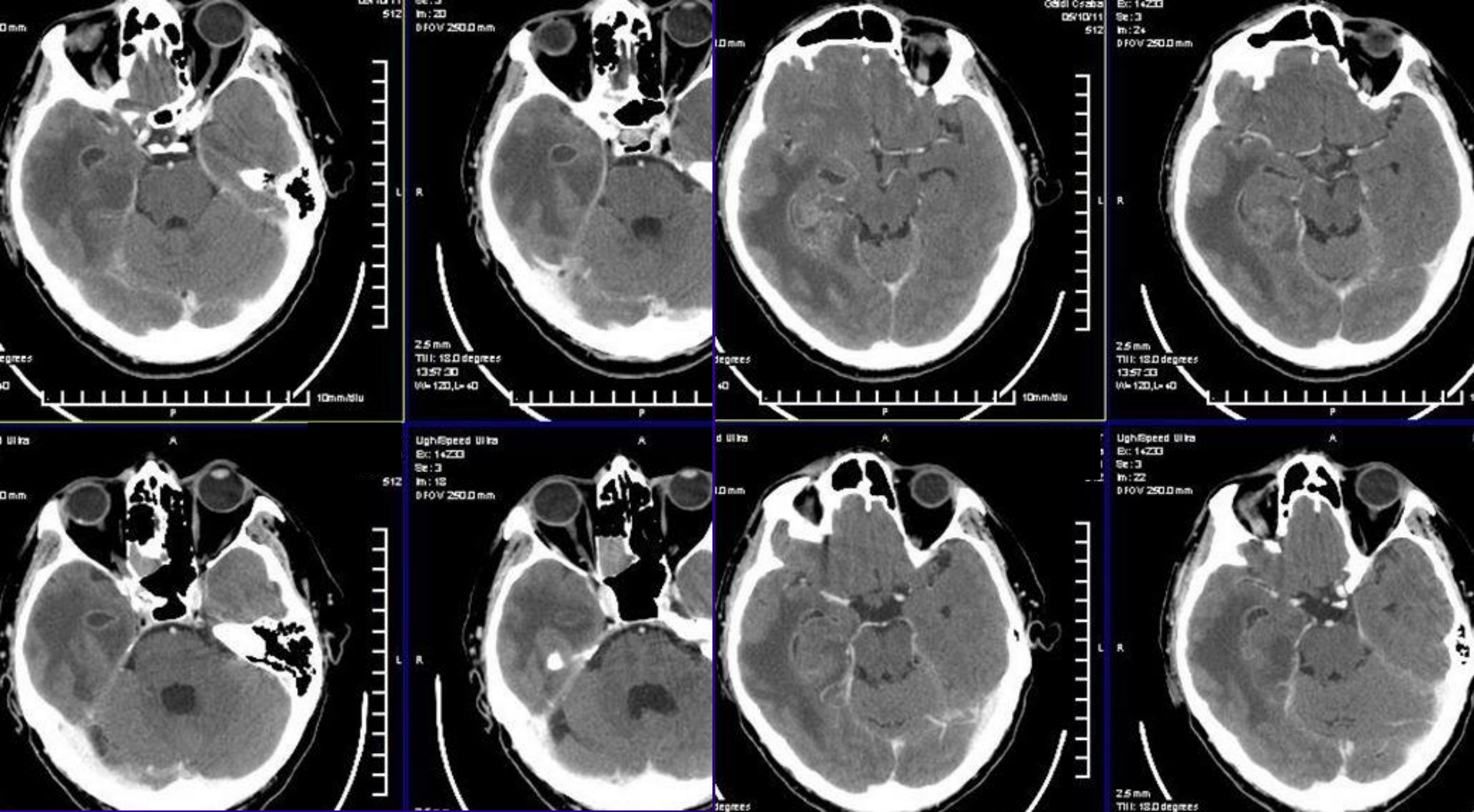
Intraparenchymalis tumorok attributumai

Méret

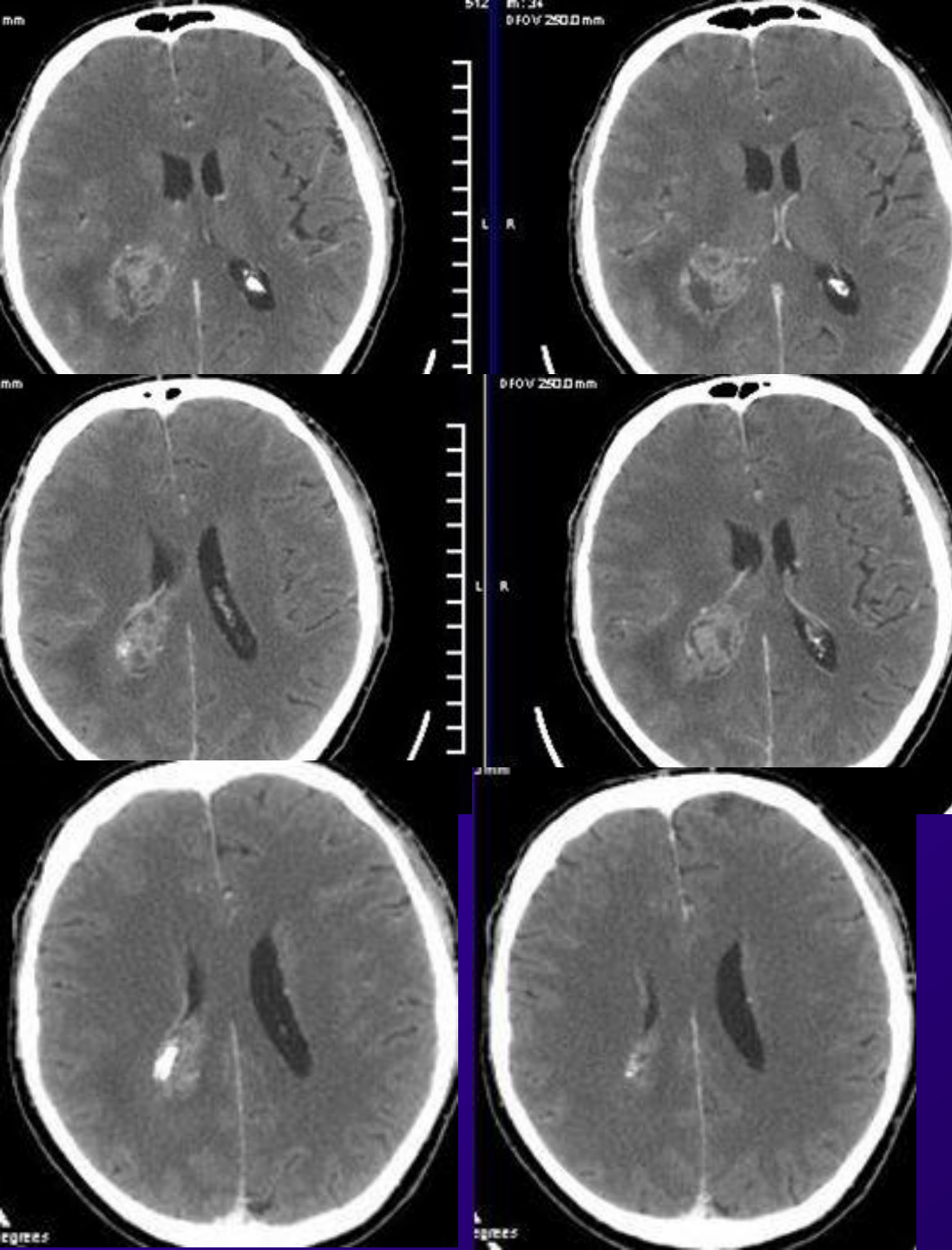
Alak

kompakt -/- struktúrában terjed





Temporalis/limbikus glioma



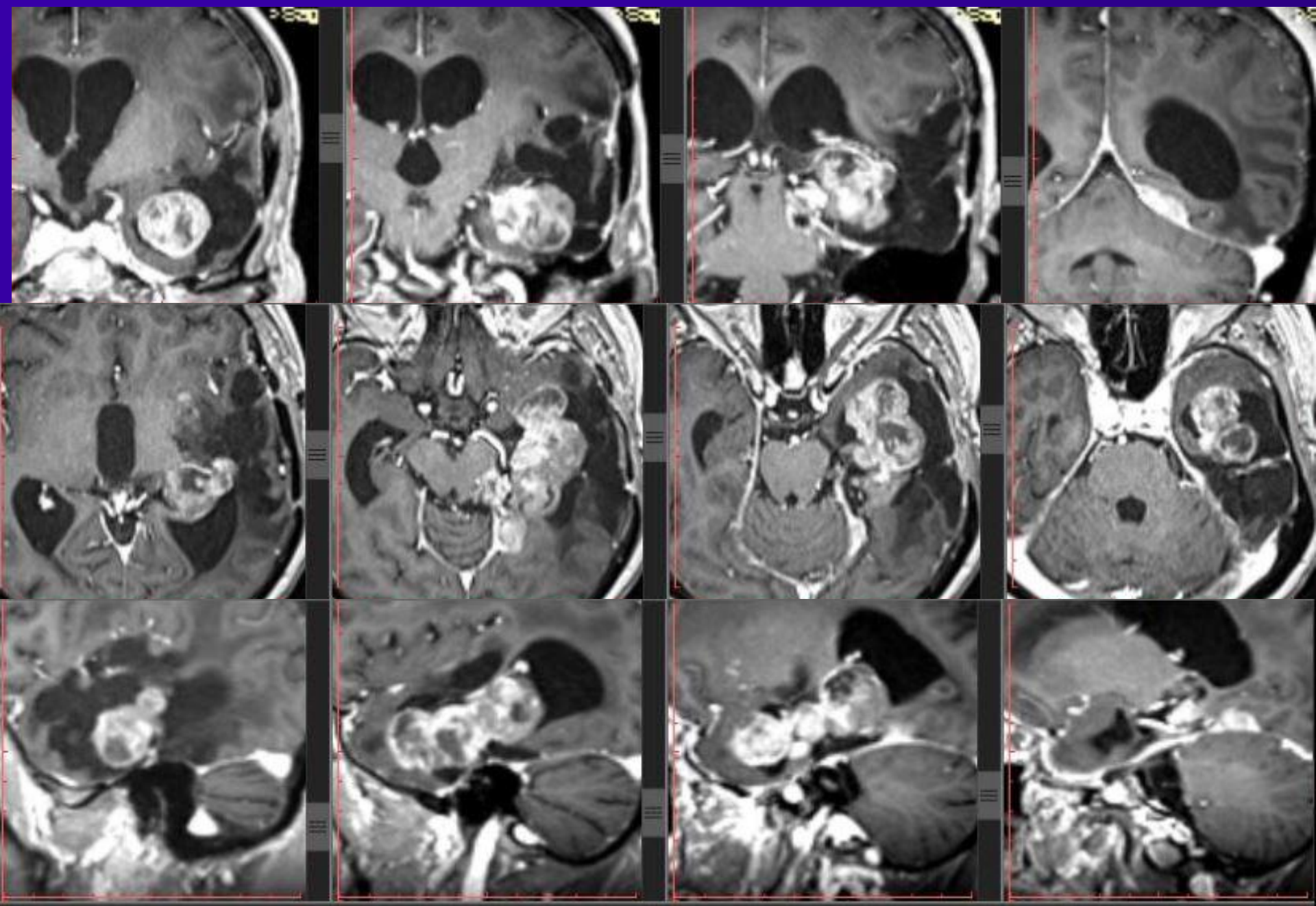
Limbikus glioma

Feltárás?

Intraparenchymalis tumorok
attributumai

Recidiva - residuum

Residuum & recidiva



Intraparenchymalis tumorok sebészetében használt attributumok

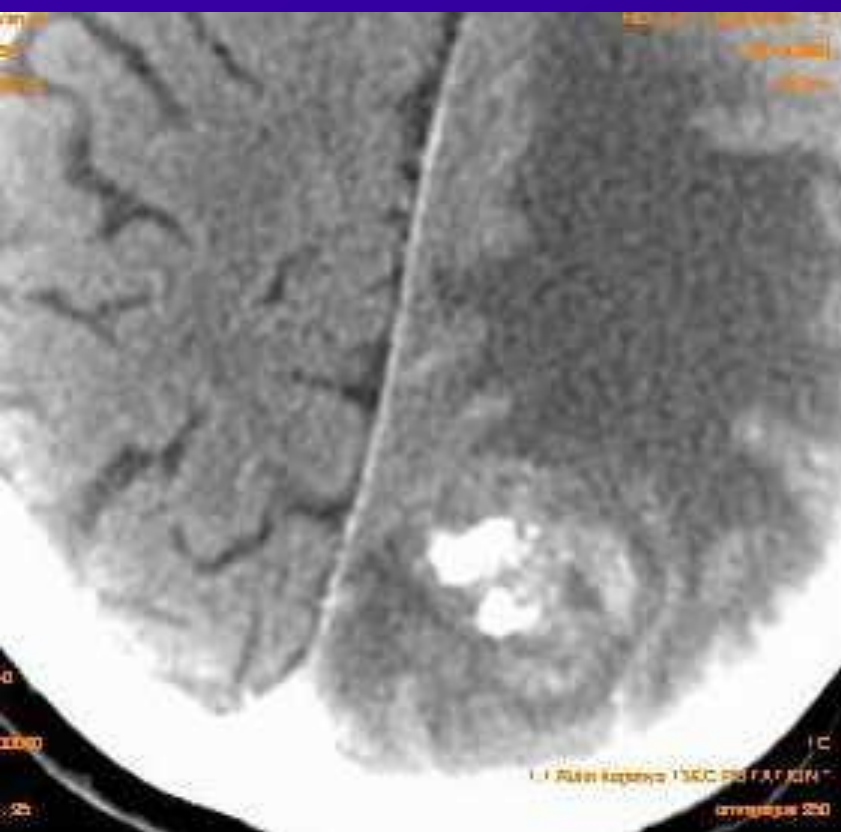
A környező agy

lokális nyomás

oedema

infiltratio

Intracranialis hypertensio



Positioning

- Anesthesia (venás nyomás)
- Alacsony ICP ALAP

Intraparenchymalis tumorok sebészetében használt attributumok

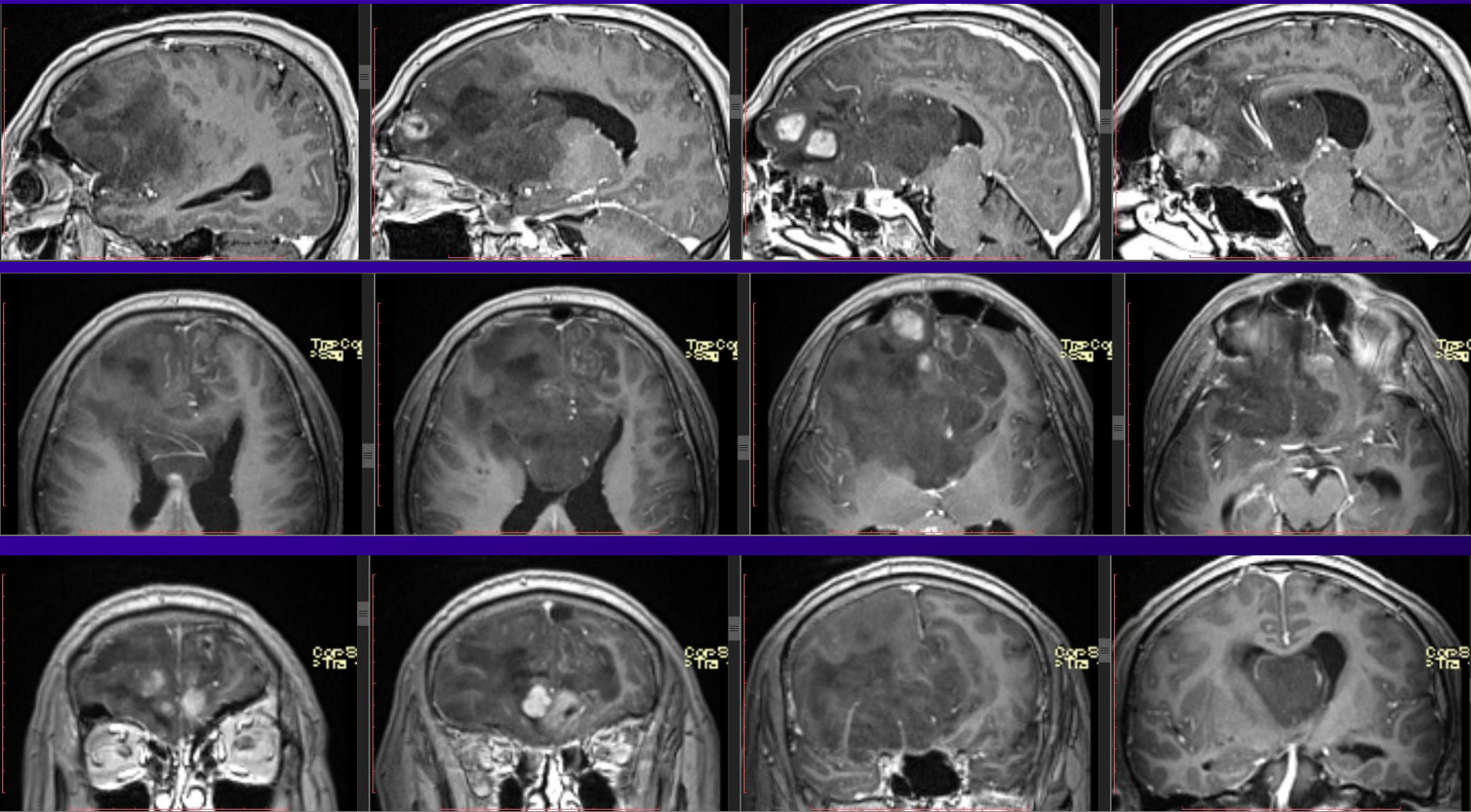
A tumor

A környező agy

Az intracranium

A beteg

Humán funkciók? Romlásuk esetén reversibilis?



ACCES#5723969AMR102
0001707296
10/26/2009
002D

CONTRAST: ACCES#5723969AMR102
4 00001707296
SE:701 10/26/2009
IM:75 002D
19:24:09 M

CONTRAST: 4
SE:701
IM:76
19:24:09

Semmelweis E., MR Kutato Kozp.
2826 : L 1525

EC:1
DFOV:180
0.7thk/
0.7sp
TE:4.929
TR:10.77

Semmelweis E., MR Kutato Kozp.
W 2826 : L 1525

EC:1
DFOV:180
0.7thk/
0.7sp
TE:4.929
TR:10.77

ACCES#5723969AMR102
0001707296
10/26/2009
002D

CONTRAST: ACCES#5723969AMR102
4 00001707296
SE:701 10/26/2009
IM:77 002D
19:24:09 M

CONTRAST: 4
SE:701
IM:78
19:24:09

Semmelweis E., MR Kutato Kozp.
2826 : L 1525

EC:1
DFOV:180
0.7thk/
0.7sp
TE:4.929
TR:10.77

Semmelweis E., MR Kutato Kozp.
W 2826 : L 1525

EC:1
DFOV:180
0.7thk/
0.7sp
TE:4.929
TR:10.77

*3 napos
újszülött*

CCE8#5723969AMR102
0001707296
0/26/2009
02D
I

CONTRAST: ACCE8#5723969AMR102
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IM:38 002D
19:33:27 M

CONTRA
SE:
IM:
19:33

Semmelweis E., MR Kutató Közp.
/ 1605 : L 923

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0.8sp
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TR:18.47 W 1674 : L 963

E
DFOV:
1.6
0.
TE:7.
TR:18

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0/26/2009
02D
I

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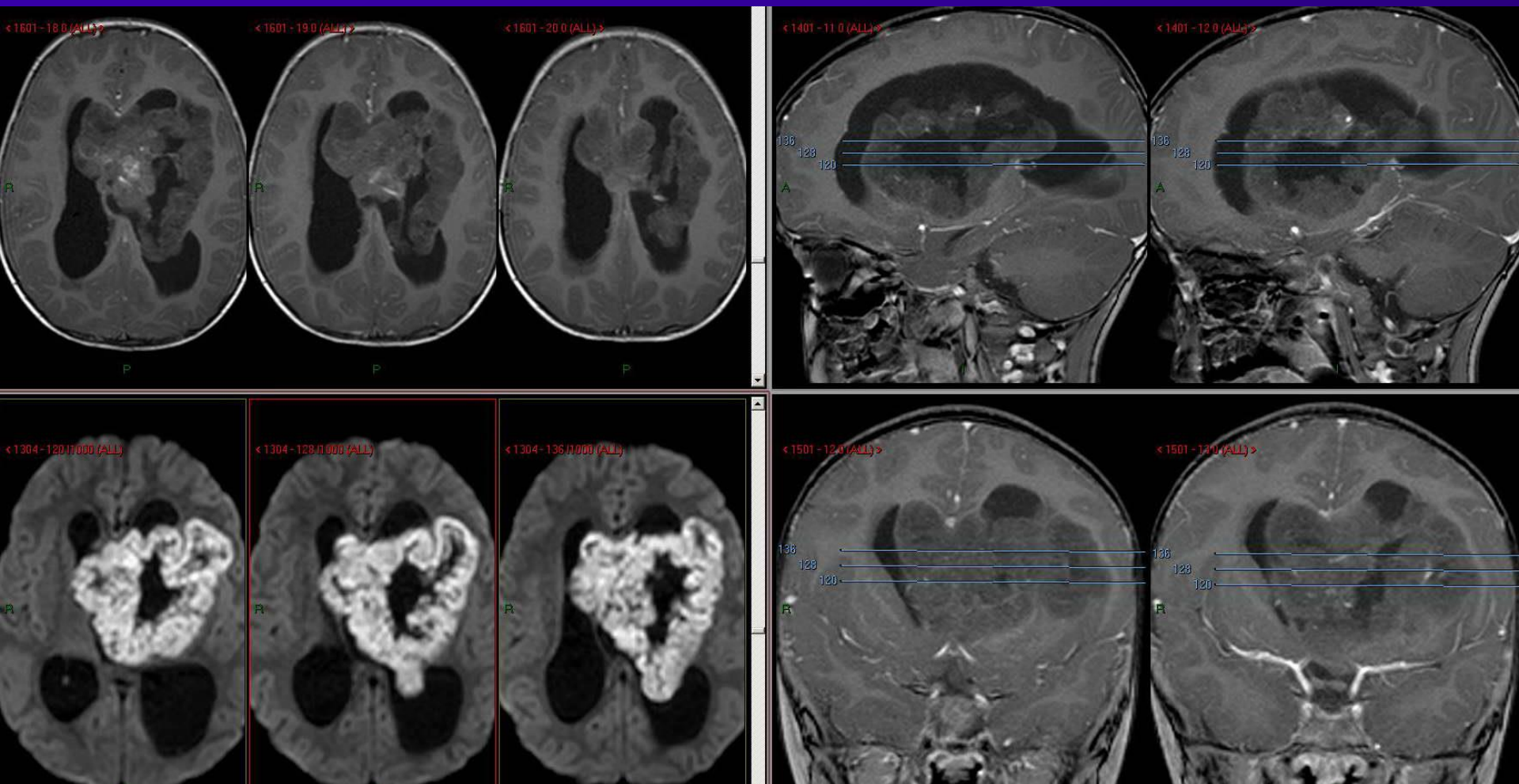
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0.8sp
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E
DFOV:
1.6
0.
TE:7.
TR:18

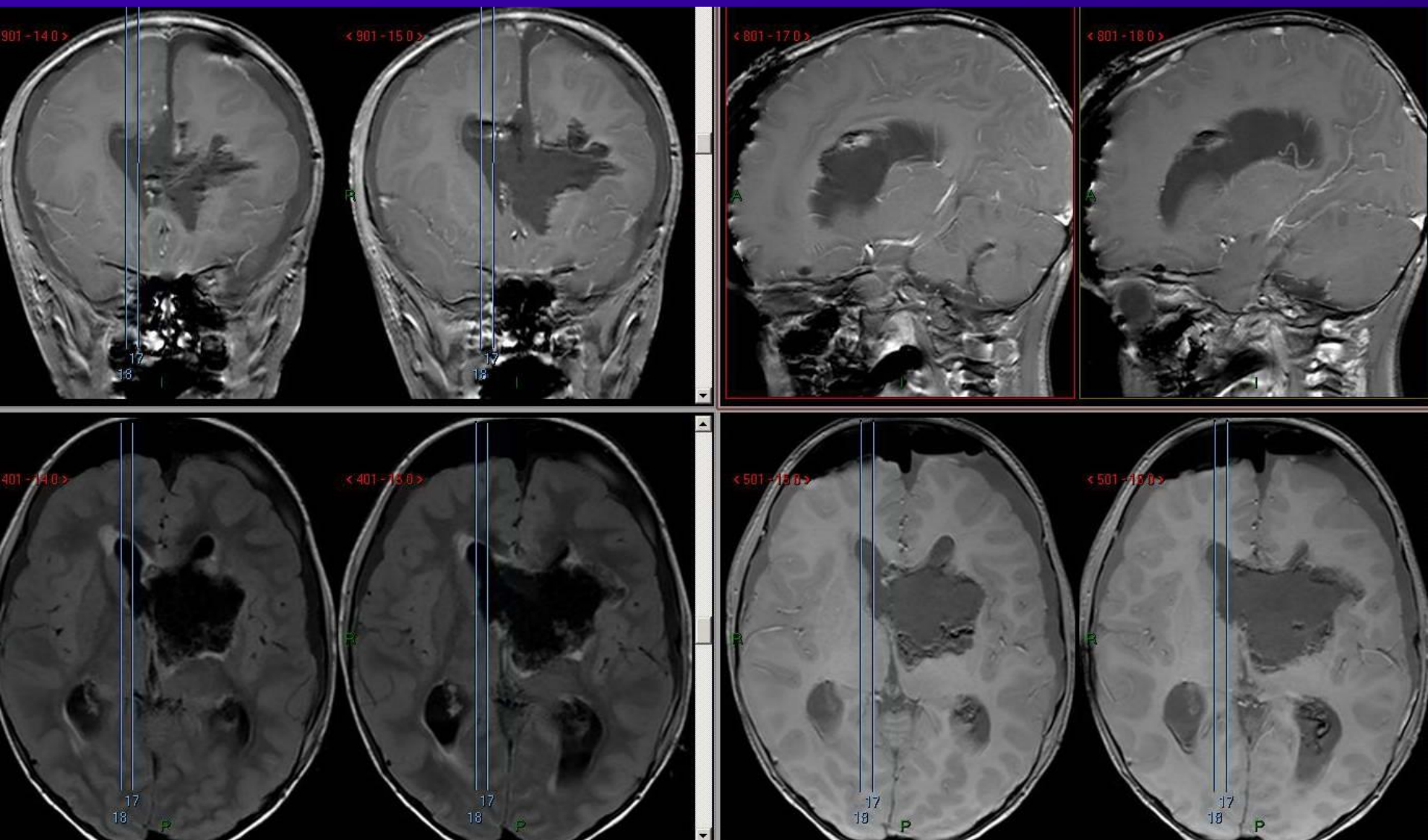
*3 napos
újszülött*

Kamrai óriás tumor 6-éves



Preop

Kamrai óriás tumor 6-éves



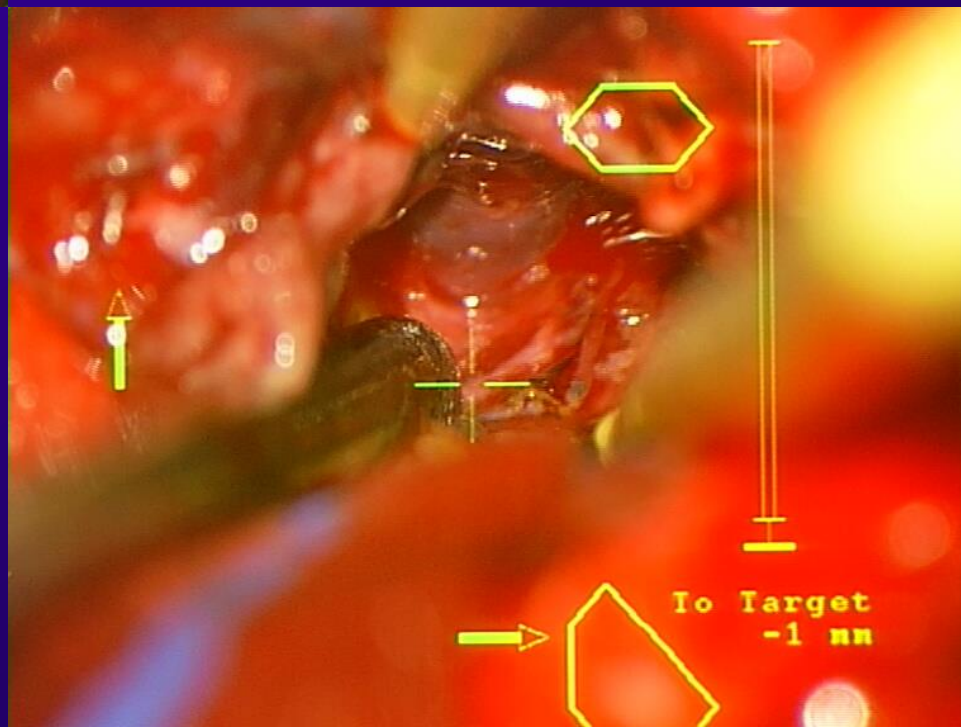
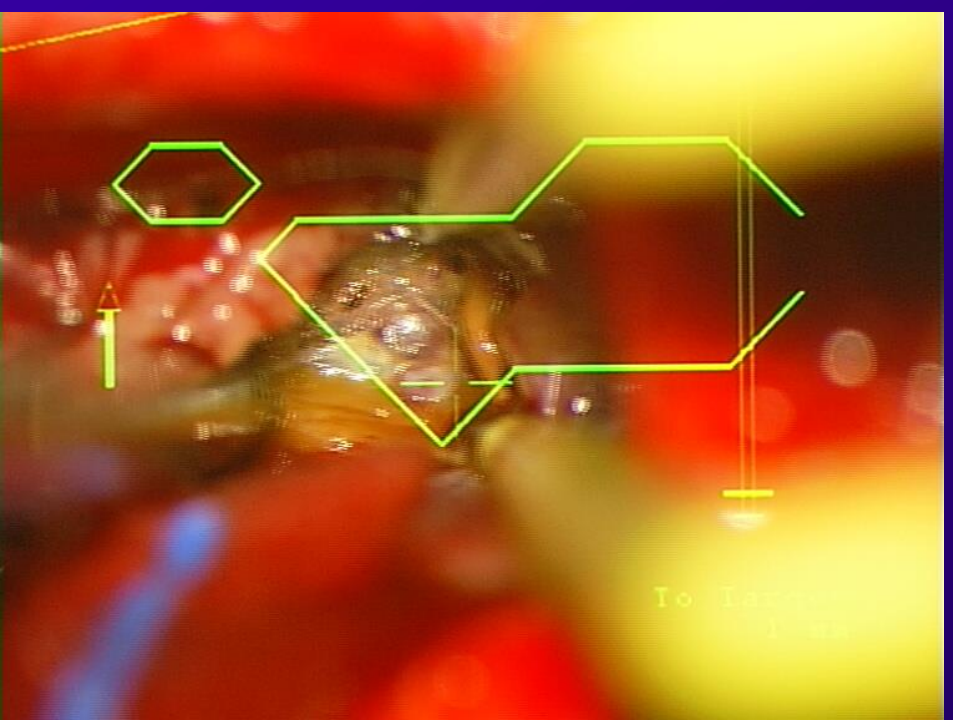
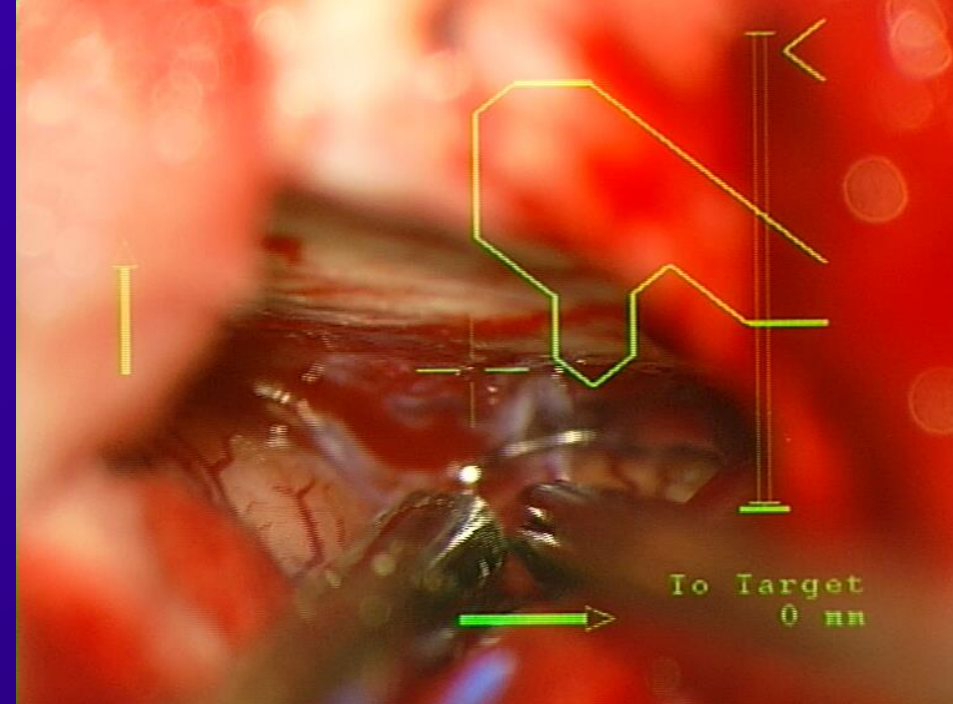
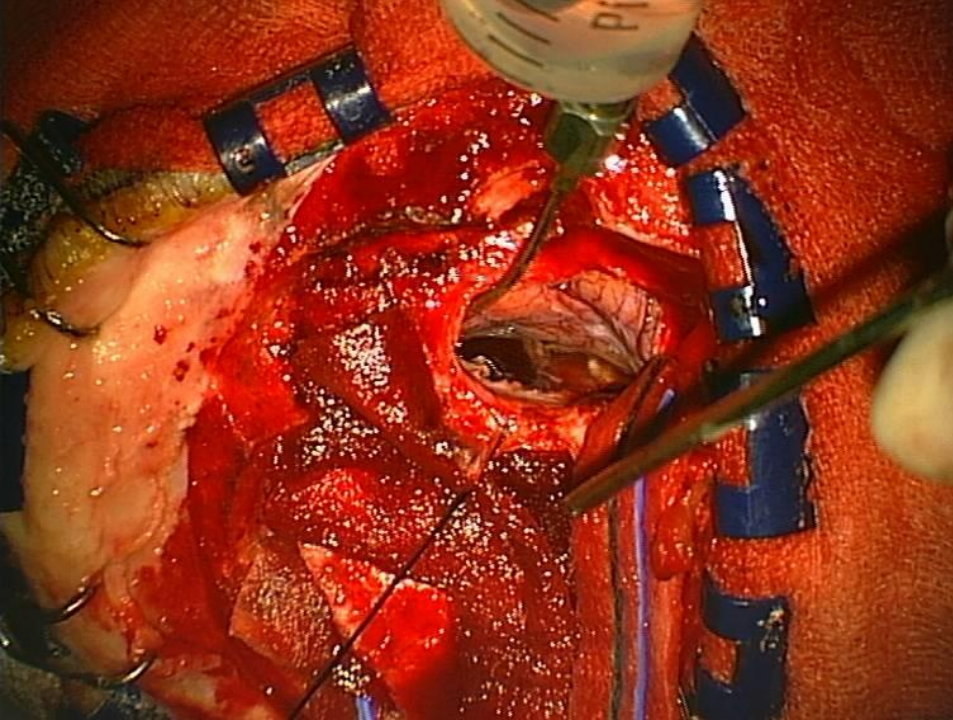
Post-transcallosalis op

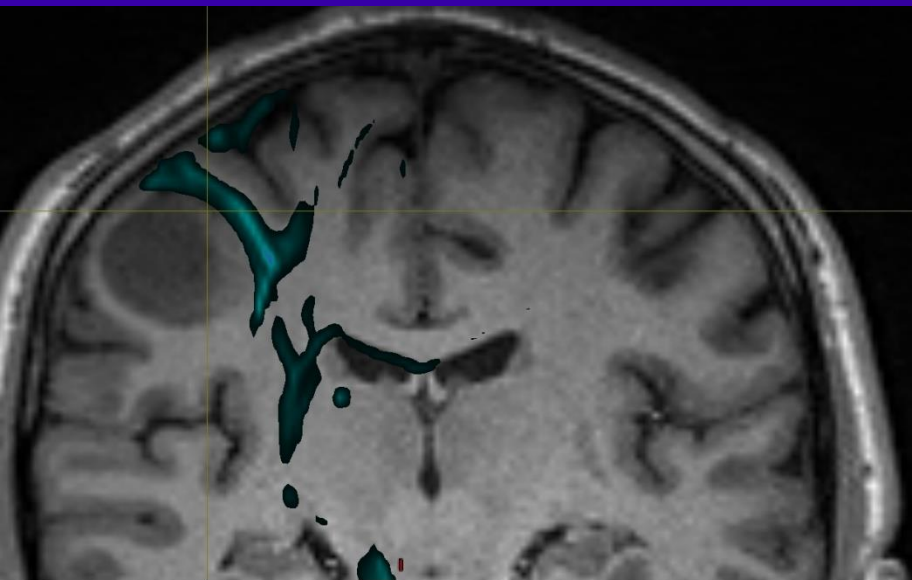
Tumor sebészeti módszerek

- Bipolaris vágás, HFBC [CUSA], non-stick
- Üregképzés,
- [Cleavage]Szélek preparálása [vakon]
- Tumor- és struktúramenti haladás
- Ér-kímélet [parasagittalis hídvenák, sinus, anterior, subcallosalisan v.cer int.]

Újabb eszközök

- Minőségi diagnosis (biopsia - spectroMR)
- Preoperativ helyzetmeghatározás [DTI- fMR]
- Intraop. helyzet- & funkciómeghatározás
 - Navigatio , UH
 - Intraoperativ Elfiz monitoring
 - fluorescencia
- [Endoscop]
- Nyitott MR műtő
- Fokuszált Ultrahang





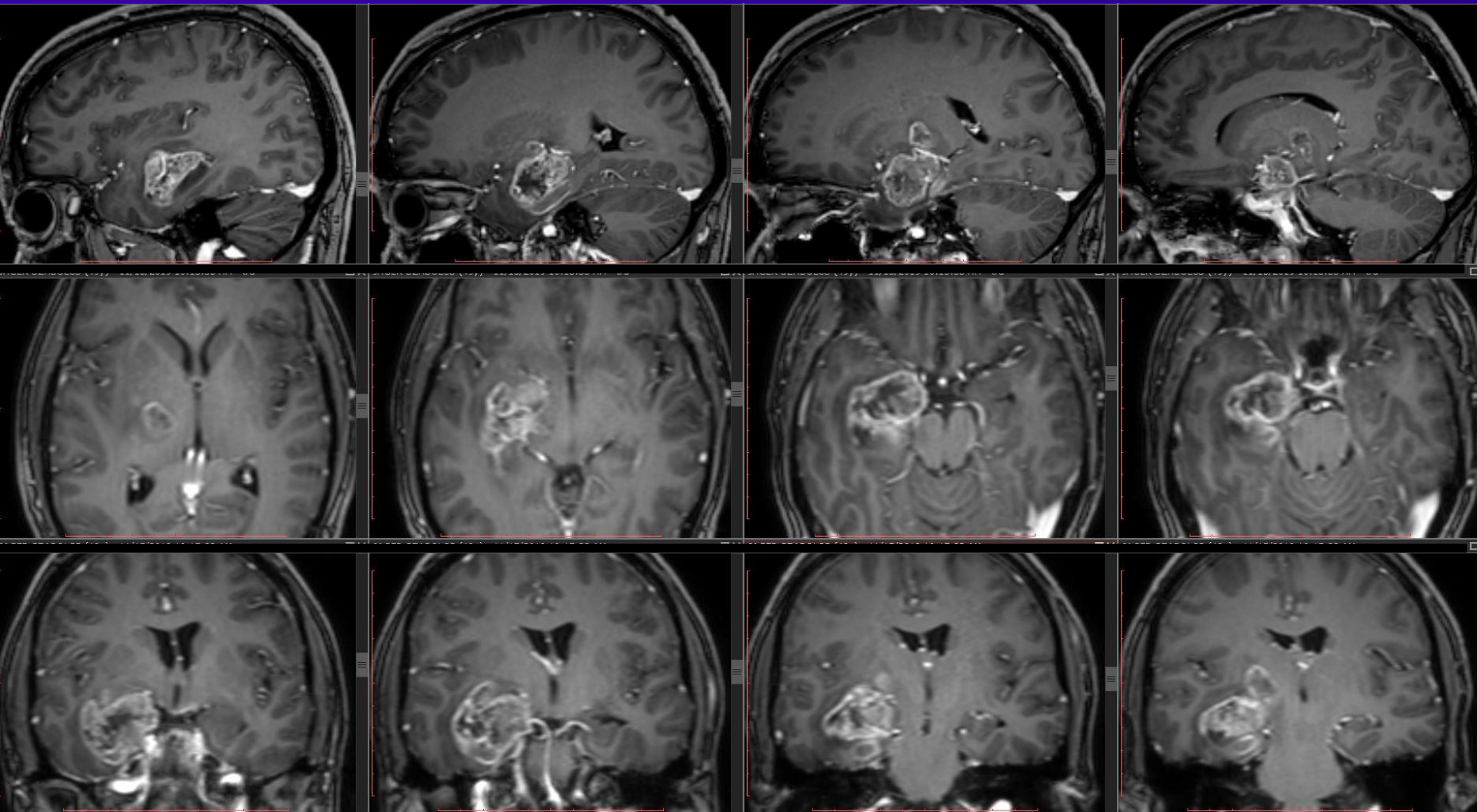
*DTI az
eloquens regio
és a tumor
viszonyához*

Intraoperatív döntések

- Radikalitás/partial resection [életminőség]
- Kétes kimenetel veszélye: alternatív megoldások:
 - több ülésben
 - belső és/vagy külső shunt-ök
 - onkoterapia

Radikalitás

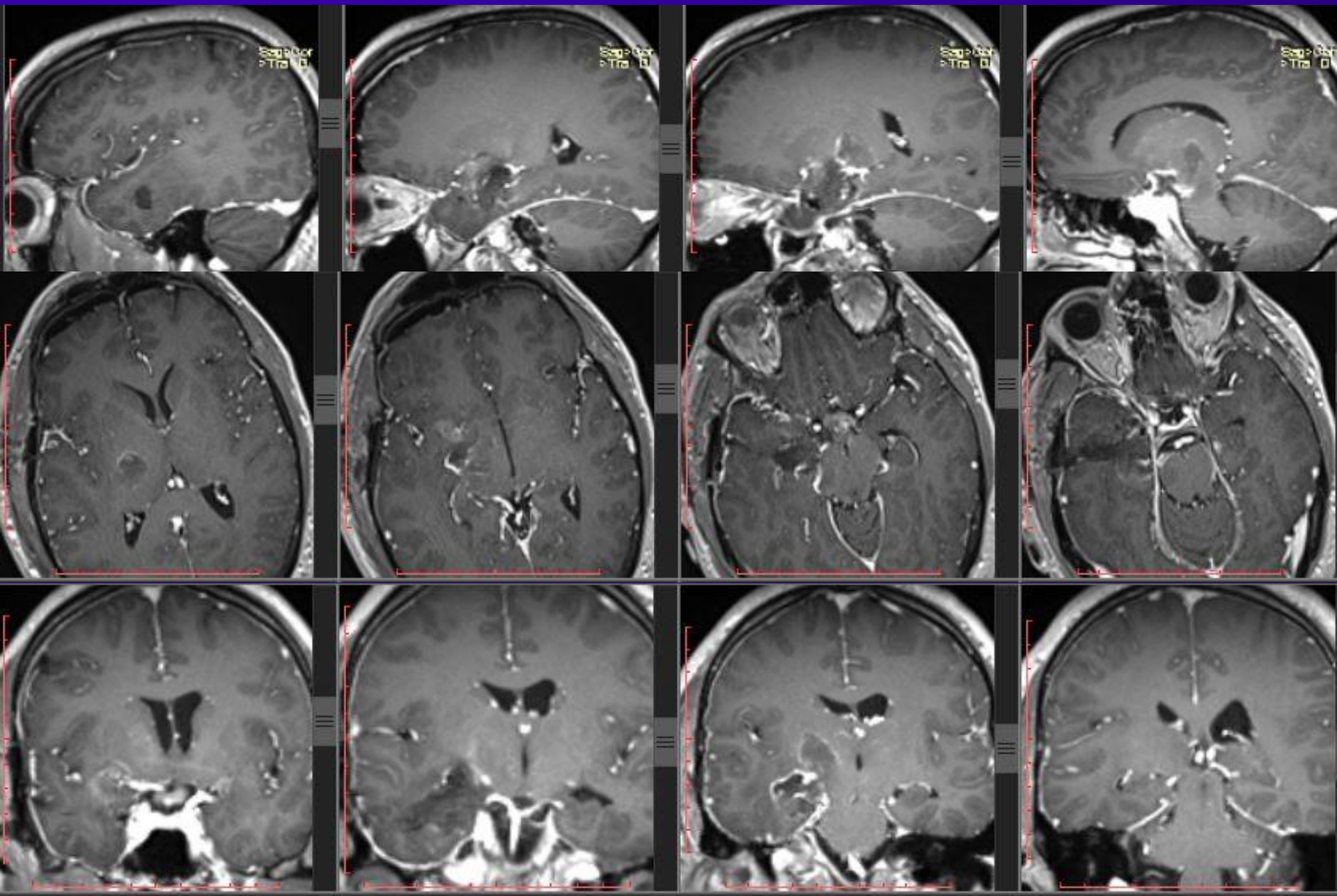
Lesionektomia/lobektomia?



Preop/ multifoc.(?) gbl

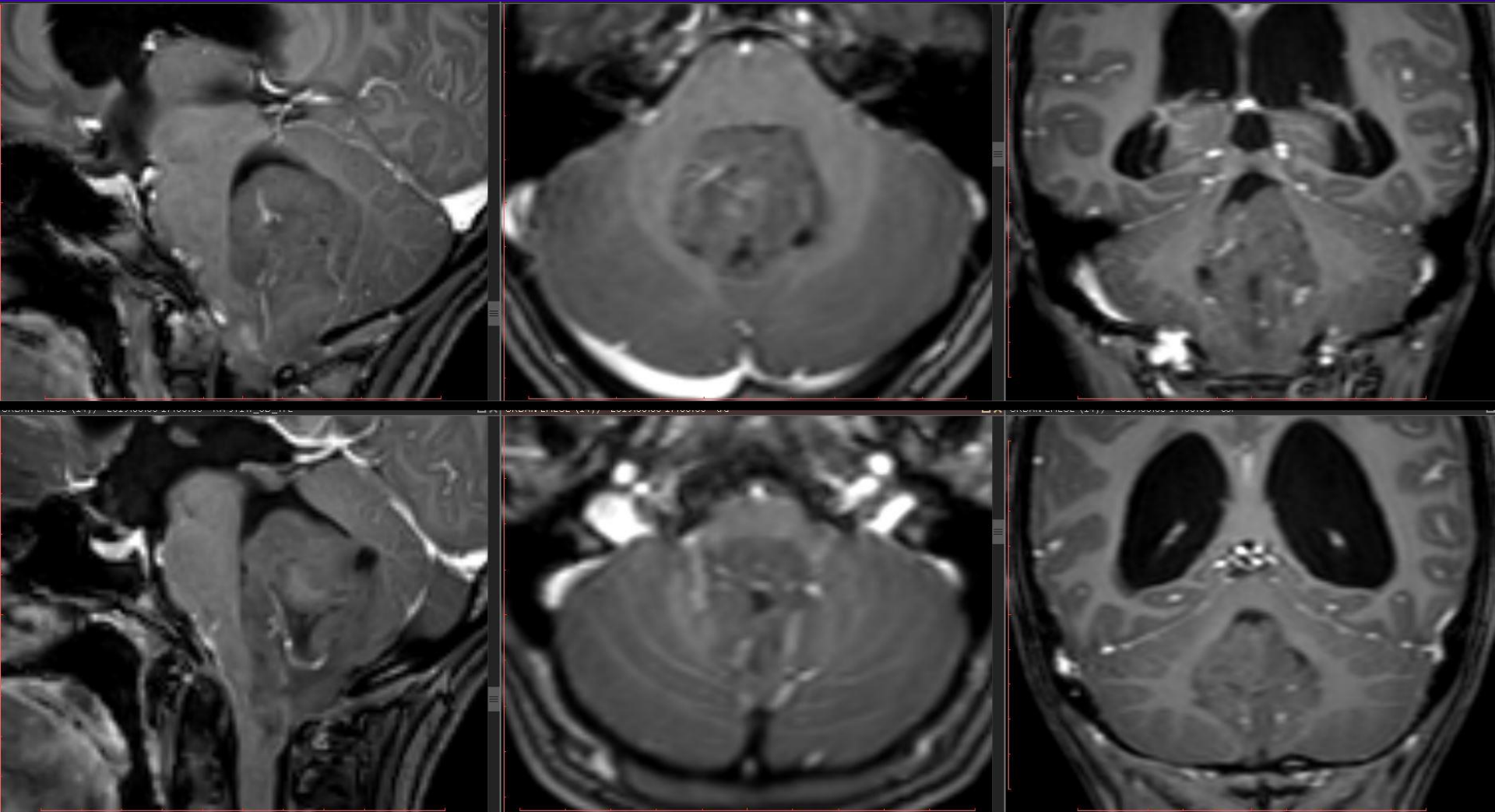
Radikalitás

Lesionektomia

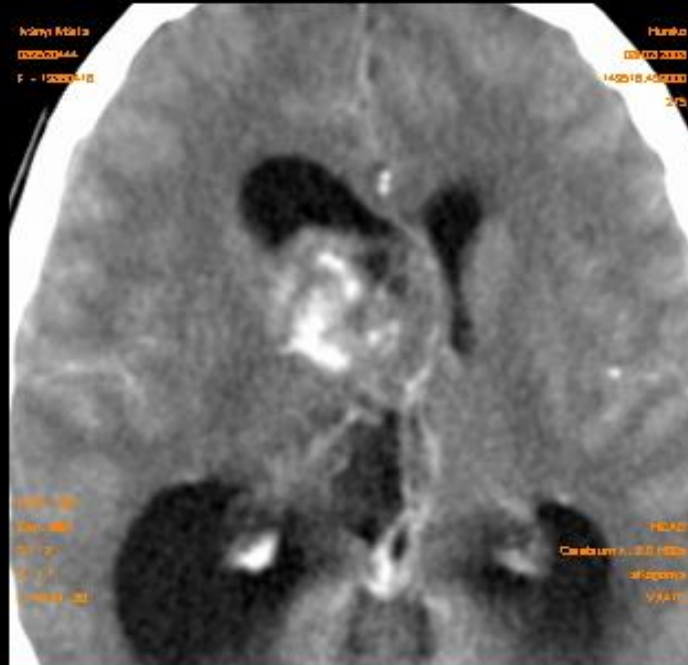
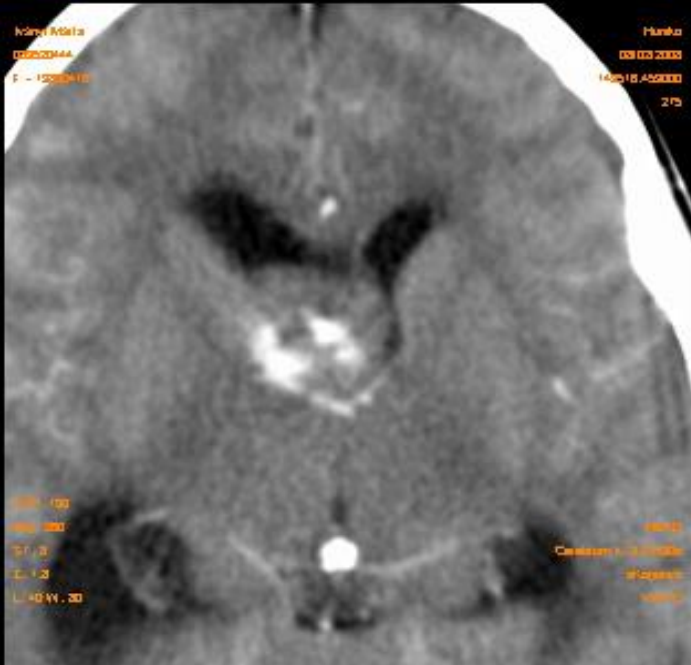


Radikalitás

Subtotális



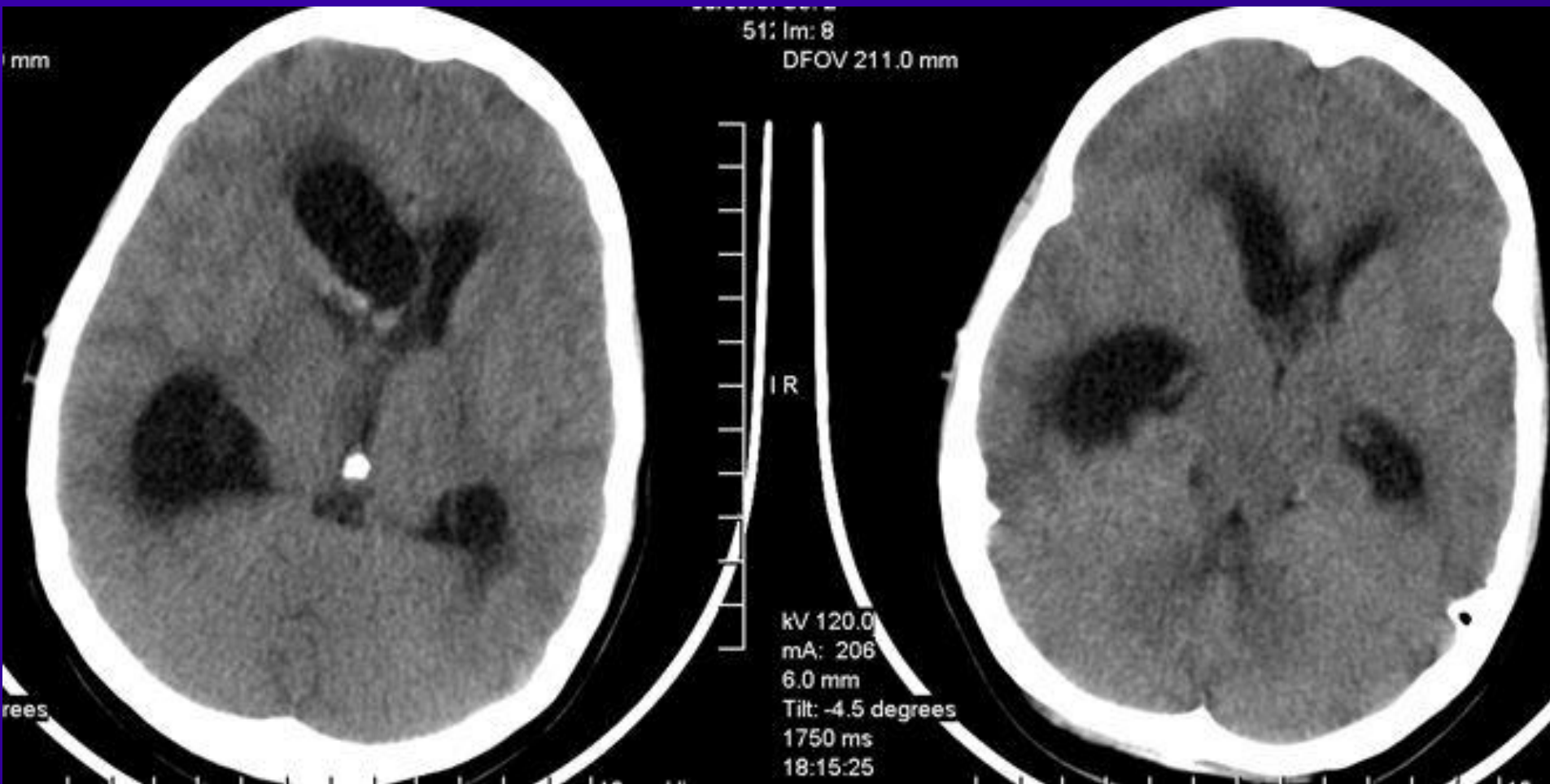
Agytörzsi residuum



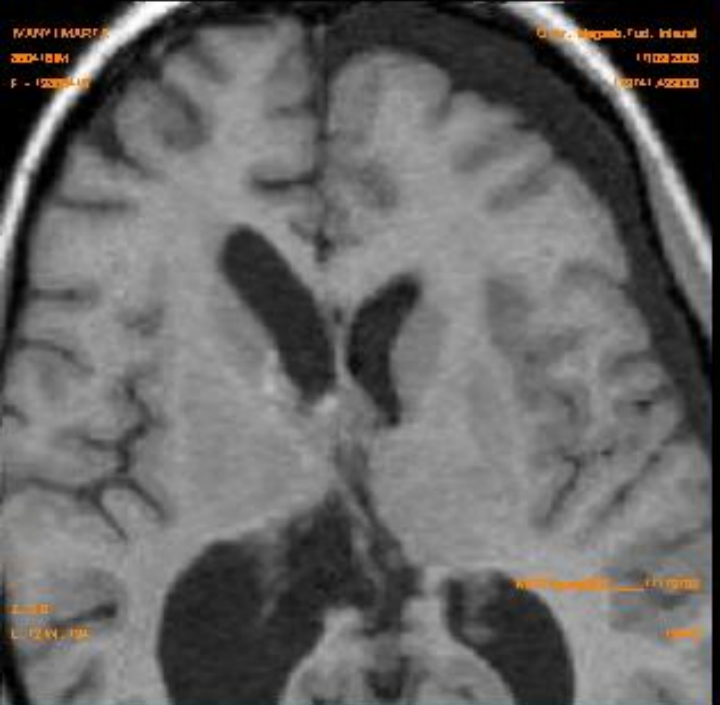
*Foramen Monro
internal shunt*



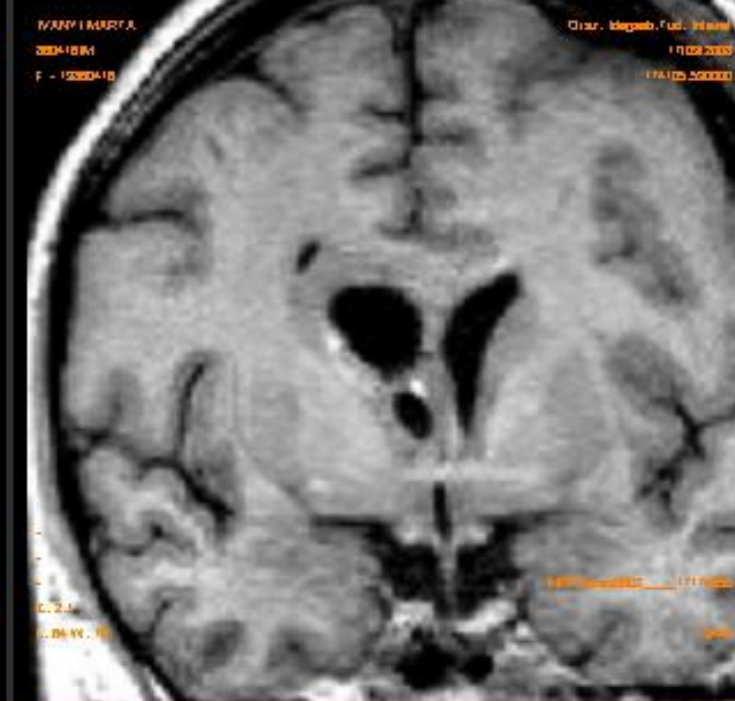
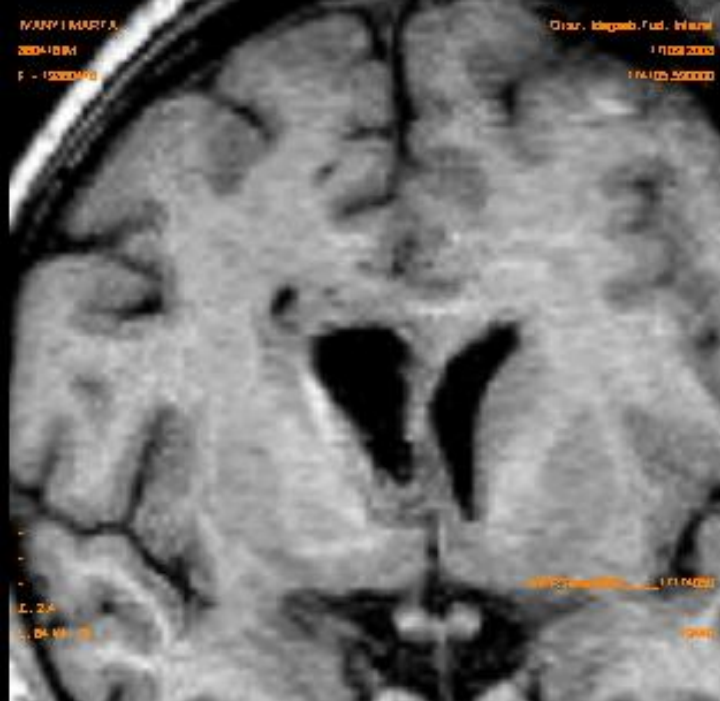
Preop



Postop



*Foramen Monroi
belső shunt
behelyezés*



*Foramen Monro
internal shunt
implanted*



Köszönöm a figyelmet

Hans von Gersdorff:
Feldbuch der Wundartznei,
Strasburg 1517

