颅脑肿瘤诊断与鉴别诊断要点

川北医学院附属医院

翟昭华教授

胶质细胞瘤 Glioma

⑴、癫痫，脑受损的定位征象；

⑵、Ⅰ、Ⅱ级星形细胞瘤CT显示以低密度为主，边缘清楚或部分清楚，坏死囊变少，占位征象轻微，水肿无或轻微，钙化较常见，增强无强化或边缘轻度强化；

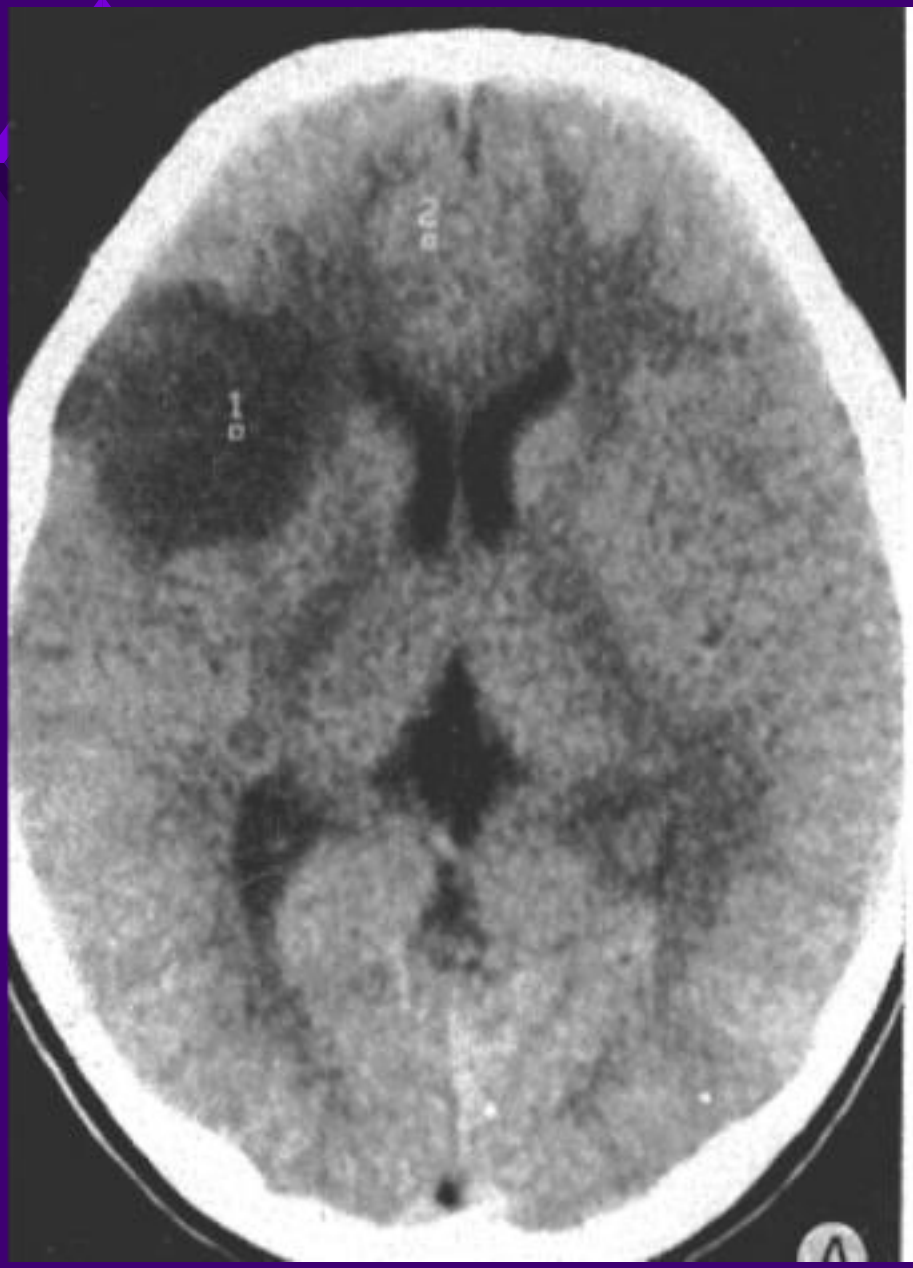
⑶、Ⅲ、Ⅳ级星形胶质细胞瘤CT上则以等低高混杂密度灶为多见，囊变坏死多，占位效应重，形态不规则，边界不清楚，水肿明显，少有钙化，增强厚强化明显，强化形式多样，可呈花环状、花边状、斑片状，环壁厚薄不均，壁结节是较具特征性的表现。

星形胶质细胞瘤astrocytoma

(4)、小脑星形细胞瘤多位于小脑半球，肿瘤实质部分强化明显，易出现阻塞性脑积水；

(5)、脑干星形细胞瘤多呈混杂密度灶，脑干增粗，水肿较轻微；

(6)、星形胶质瘤在MRI上多呈长T1长T2异常信号改变，其它表现与CT相似。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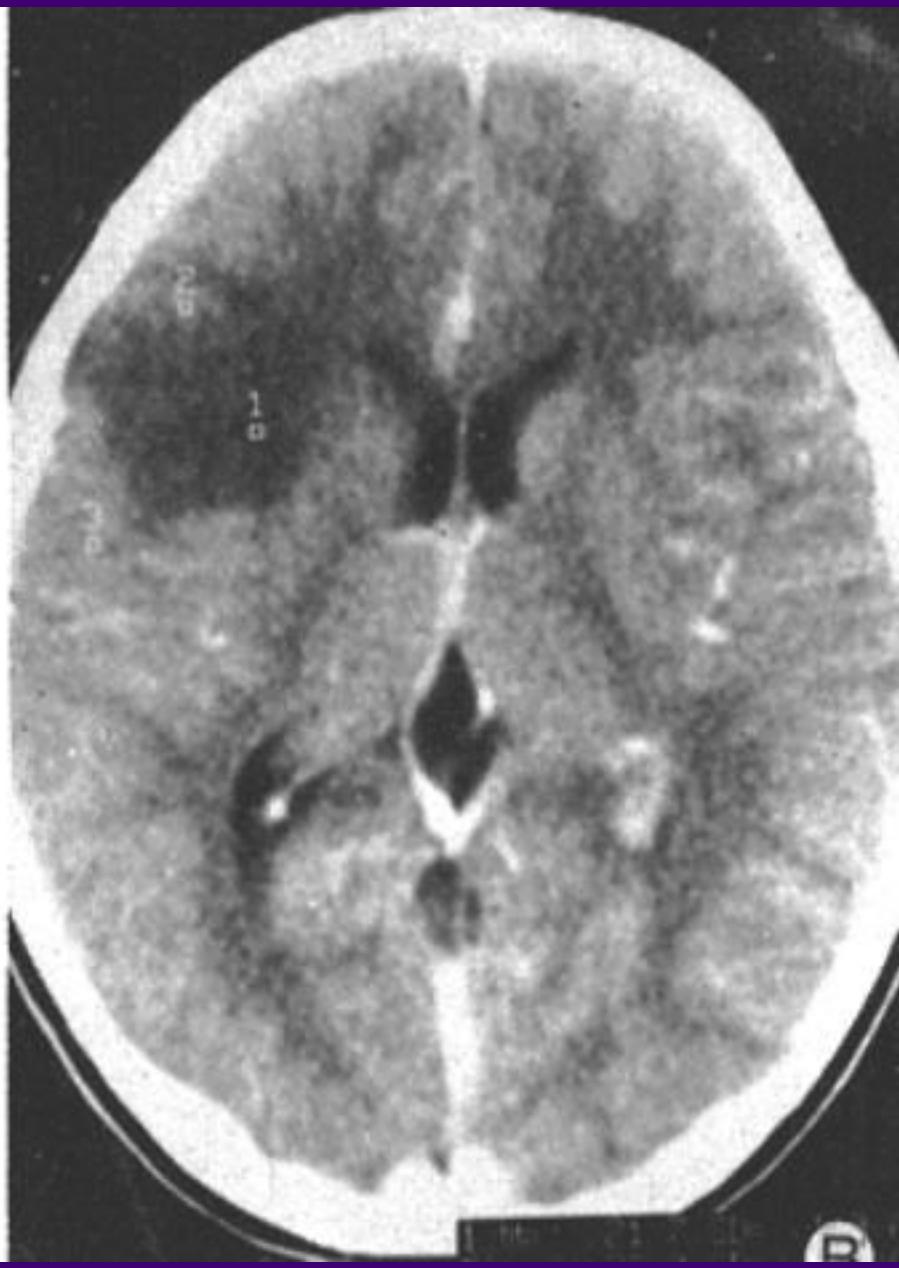
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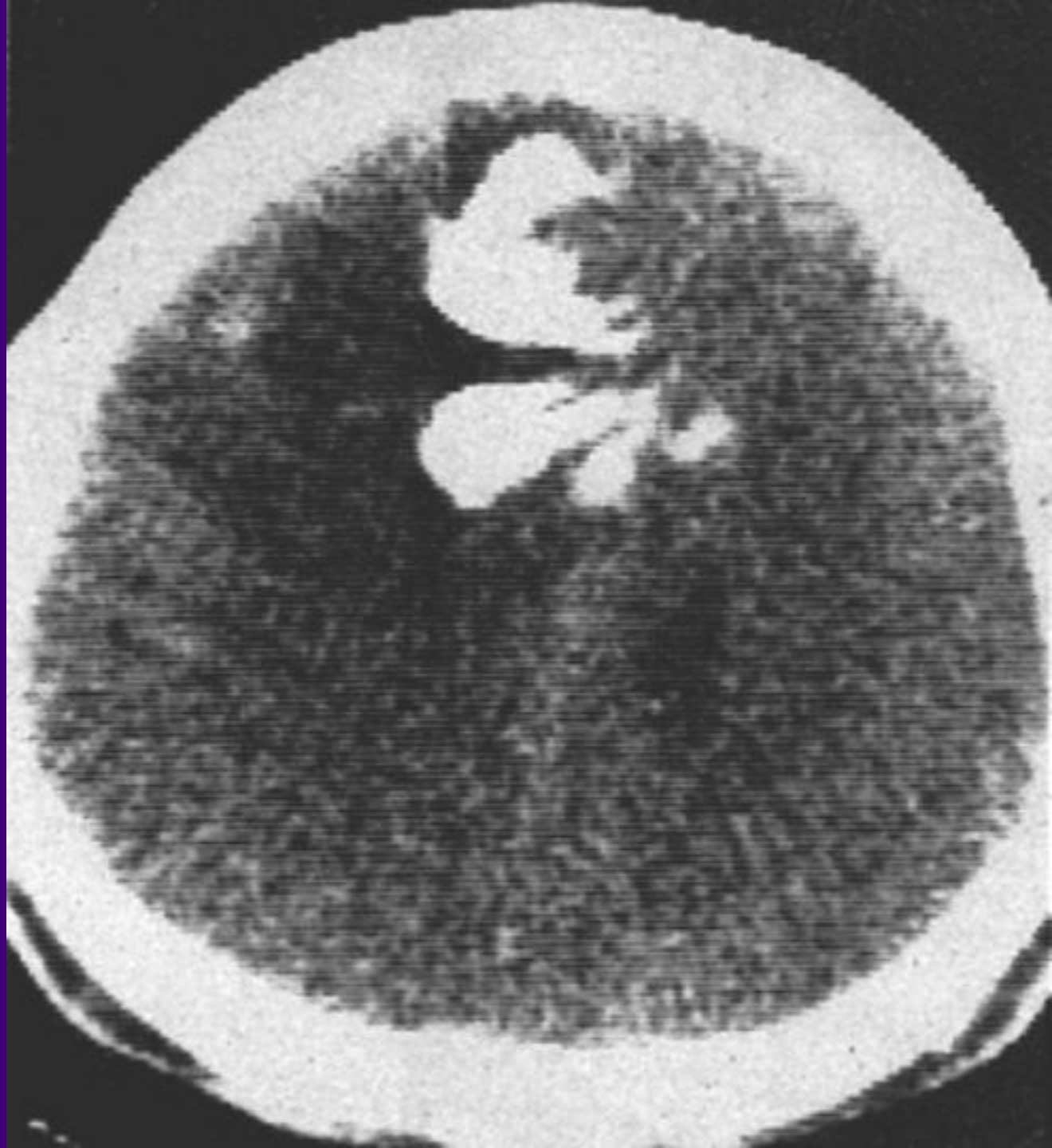
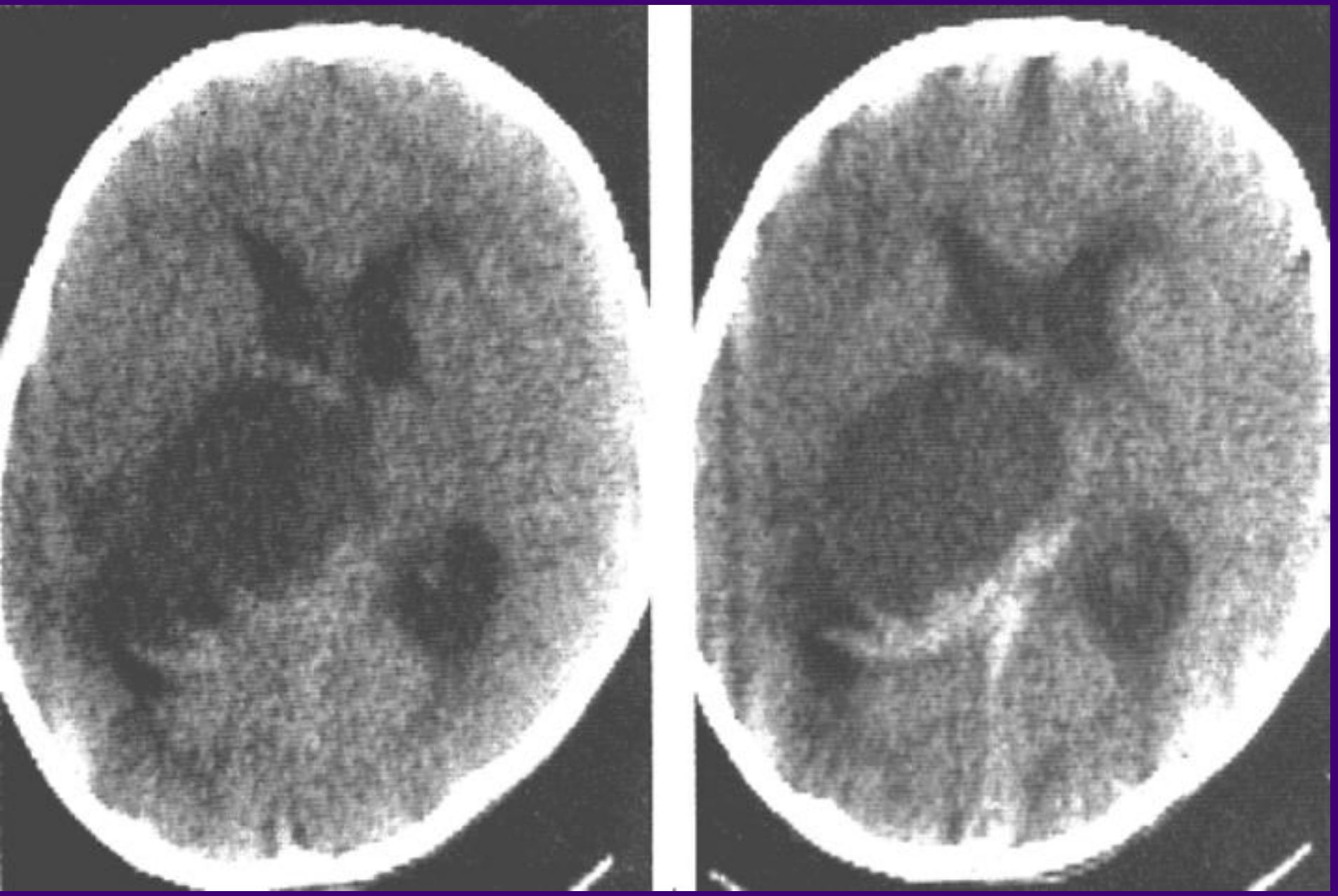
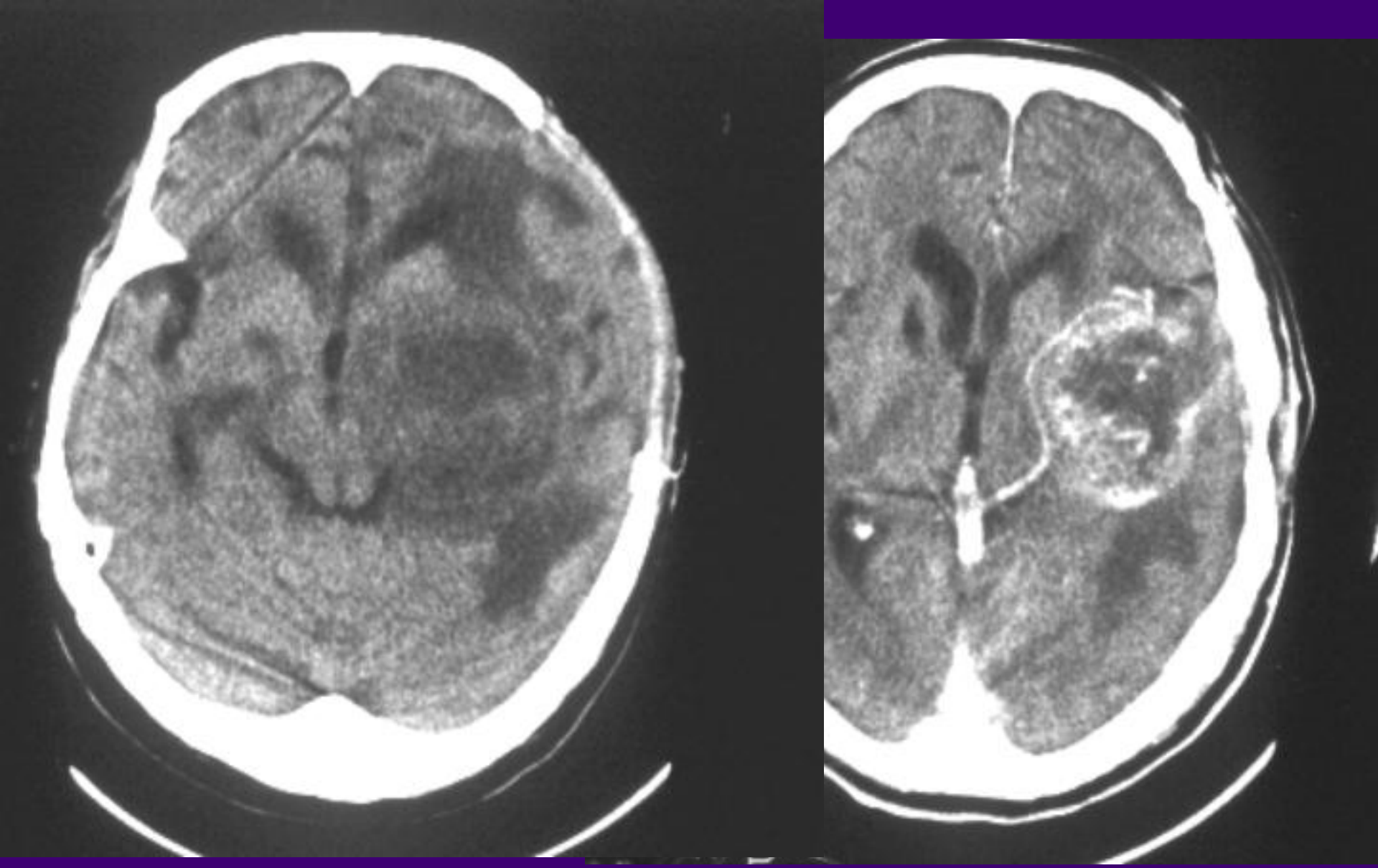
Ⅰ级星形胶质细胞瘤的钙化







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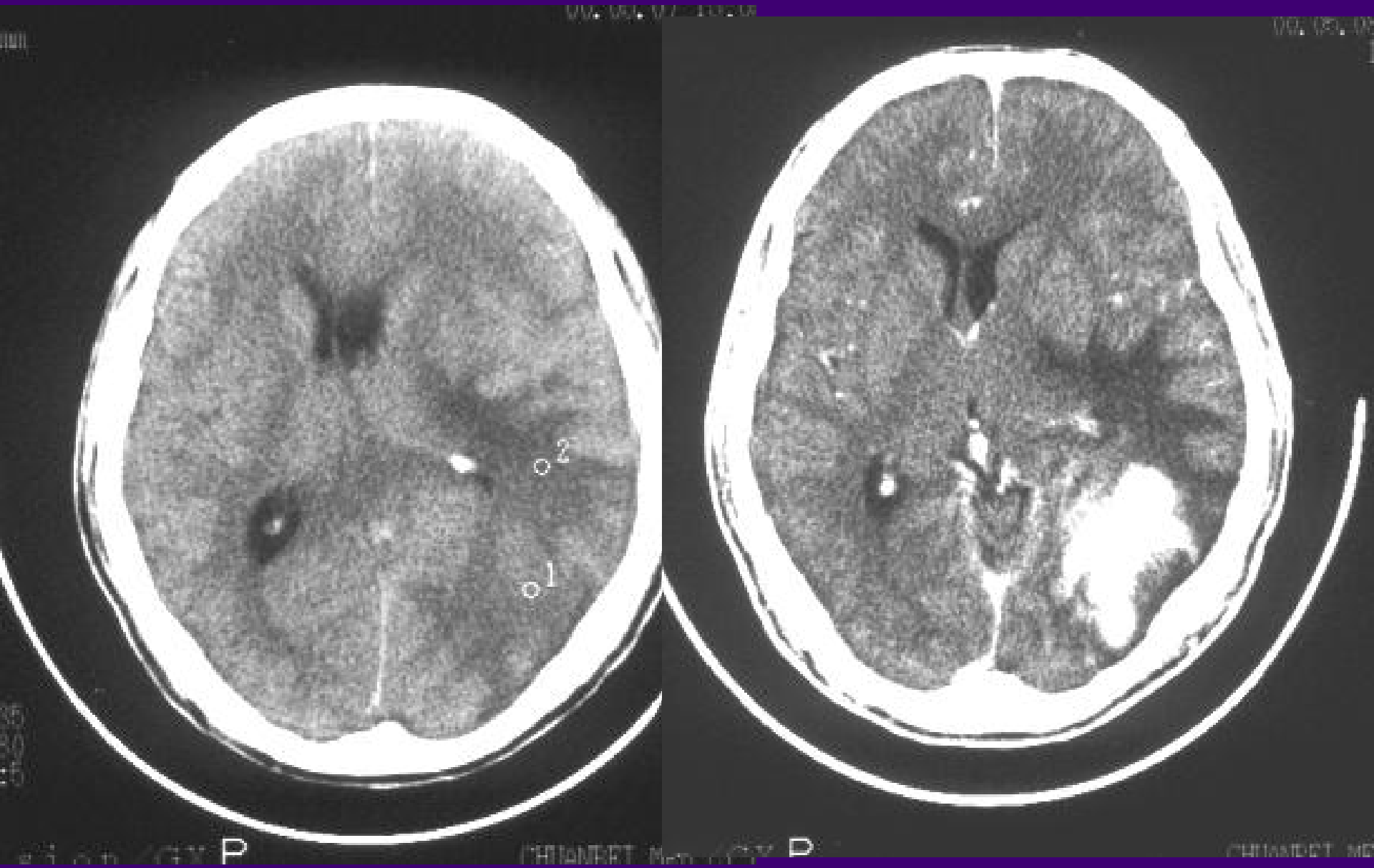
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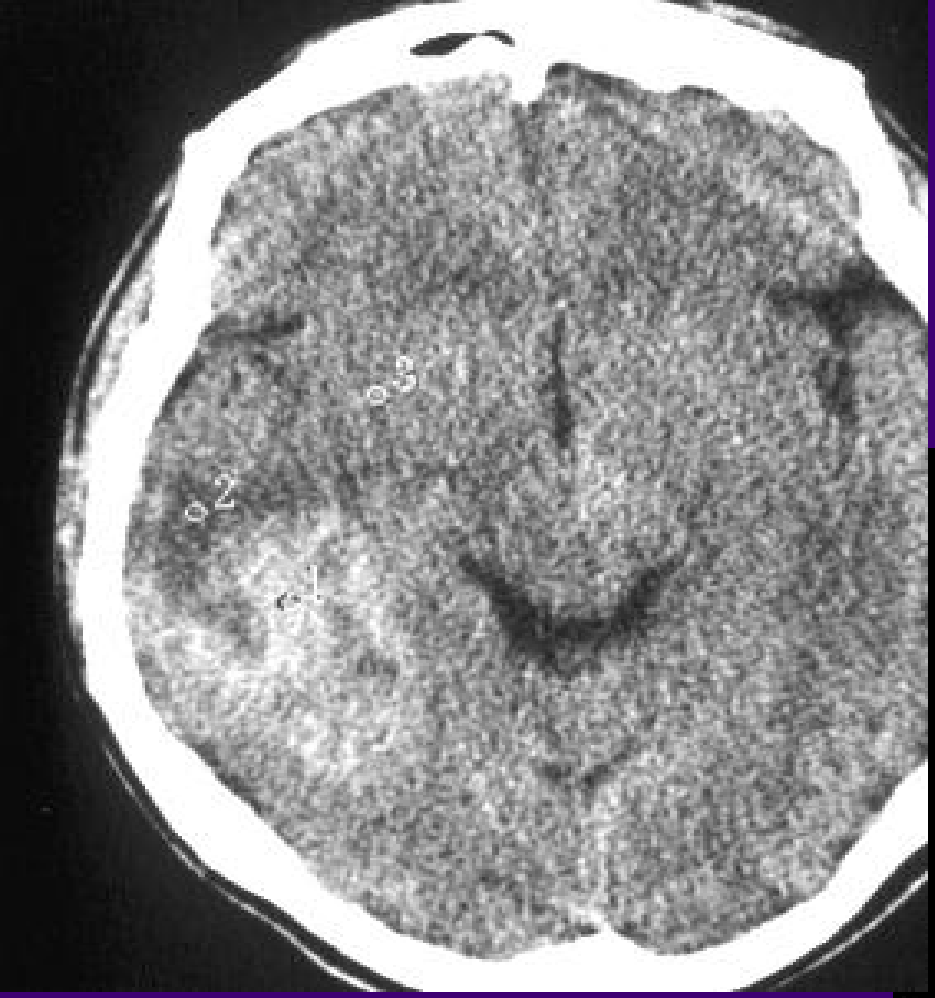

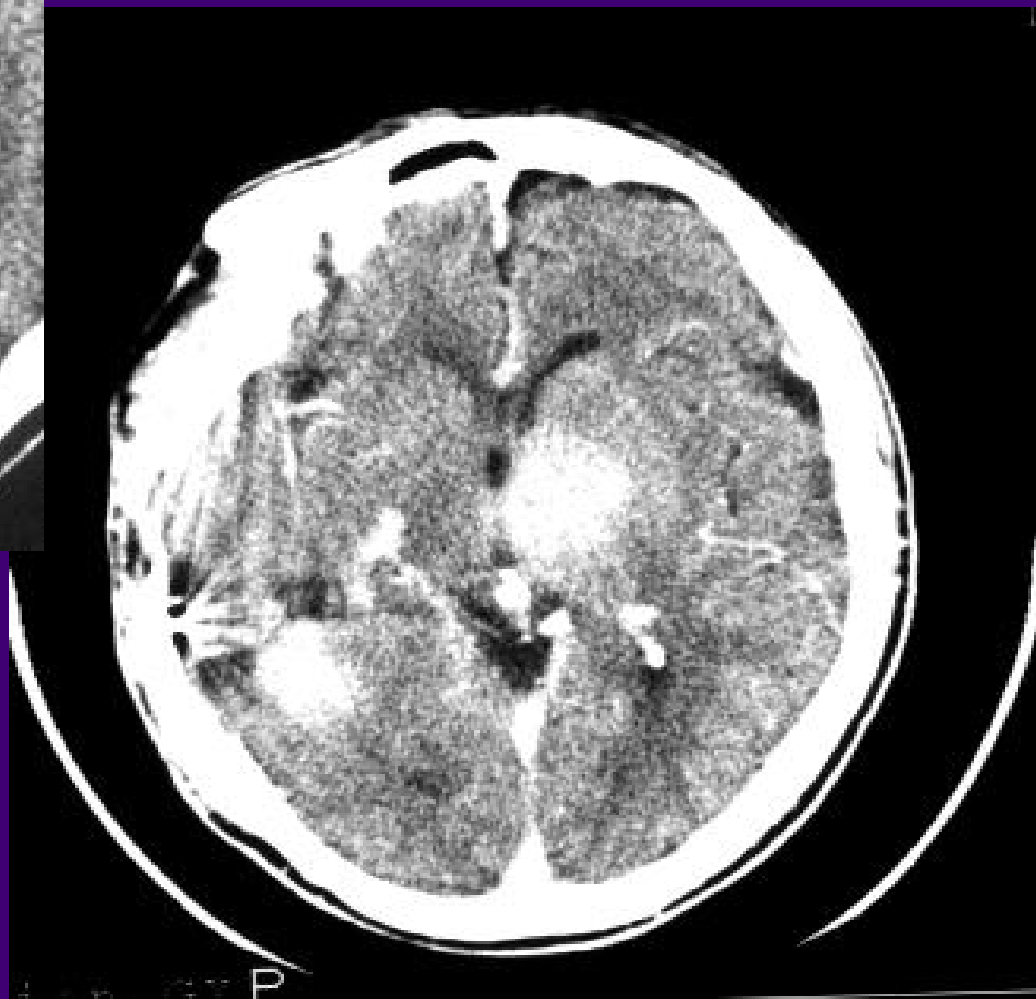

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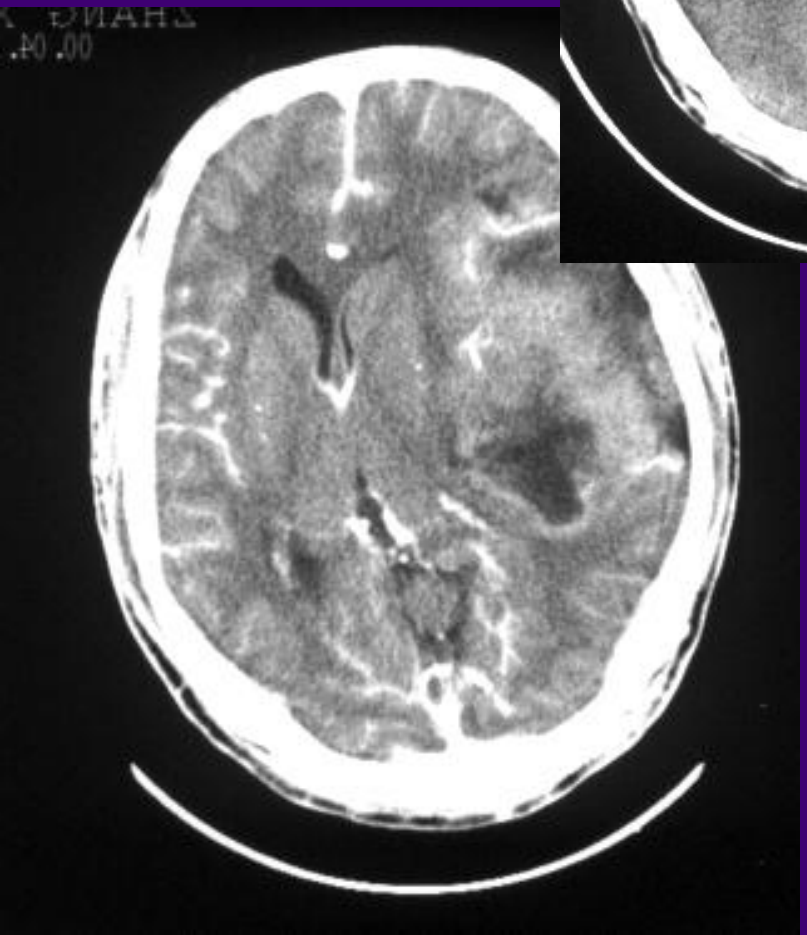

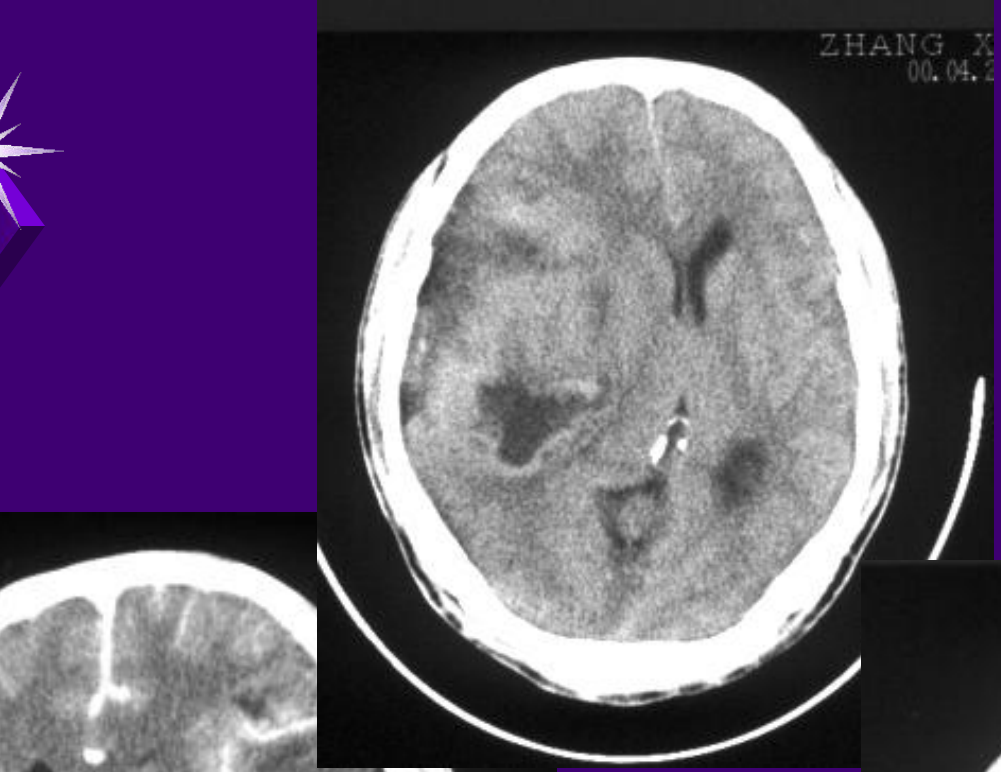
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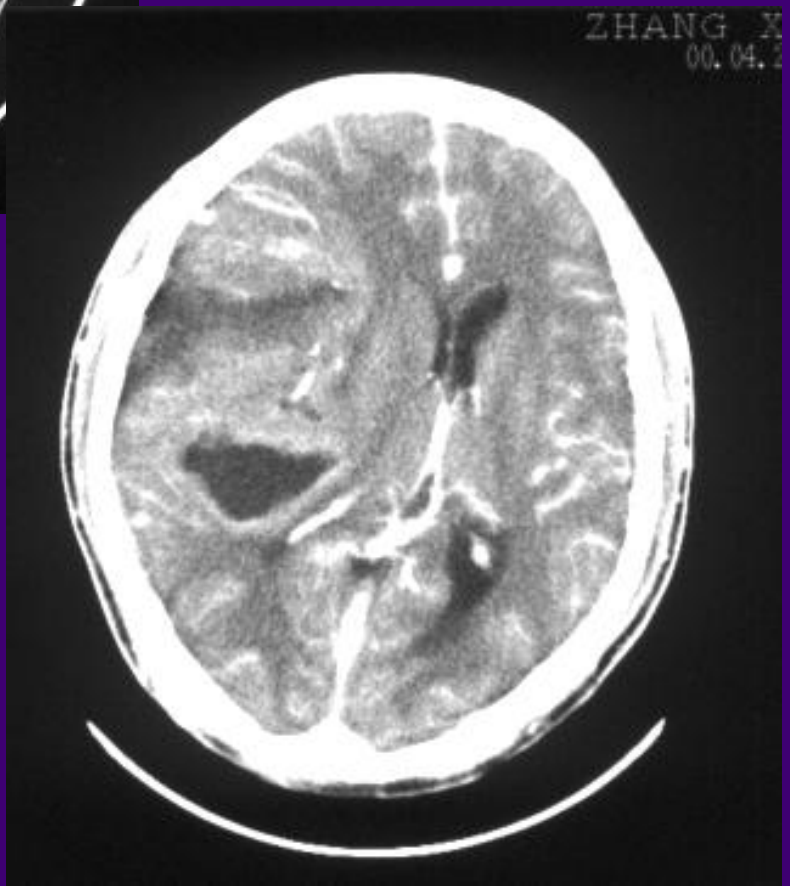
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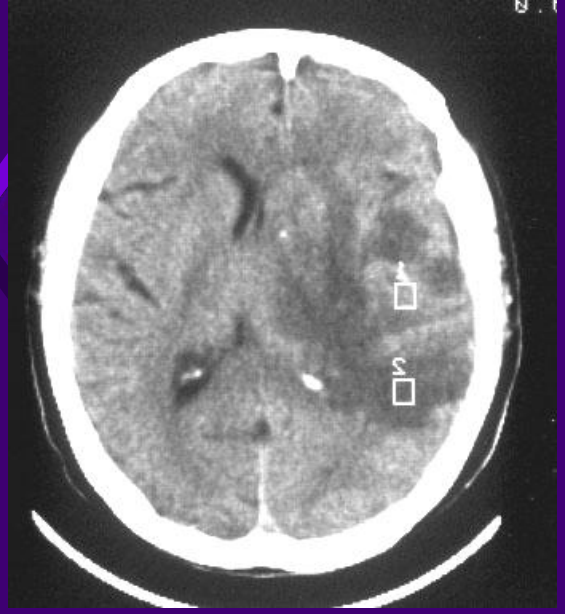
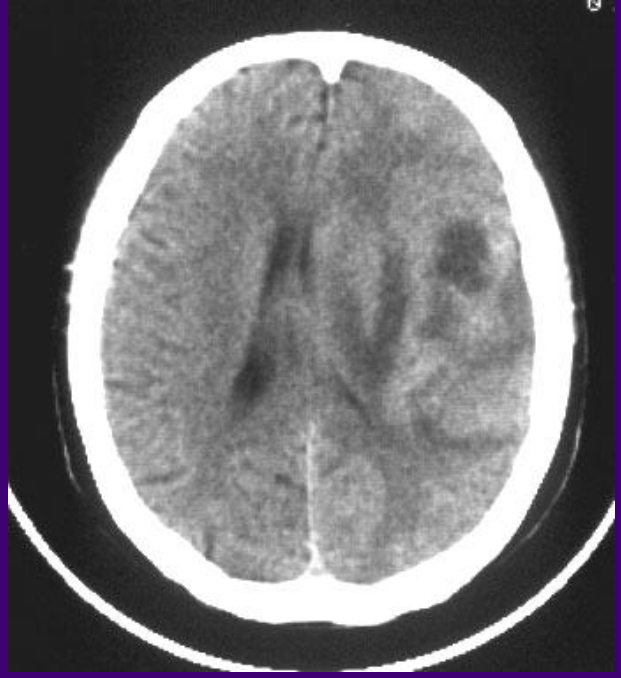
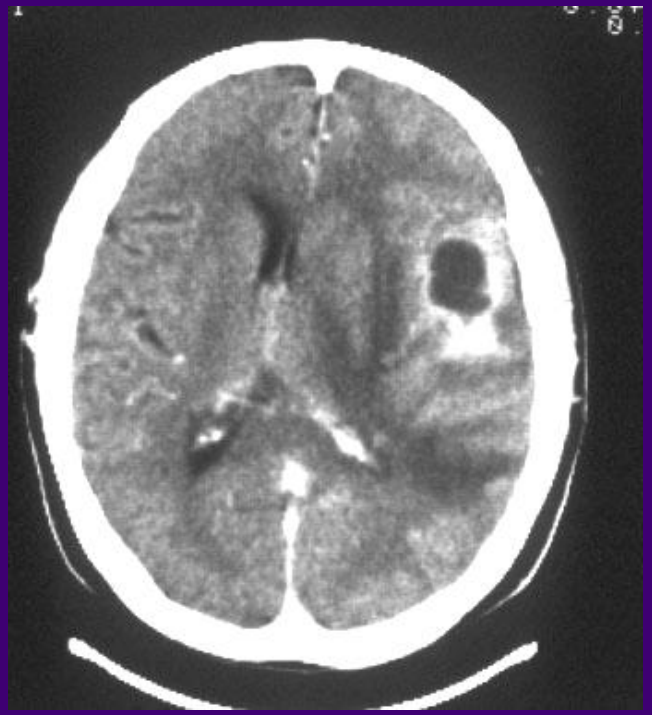
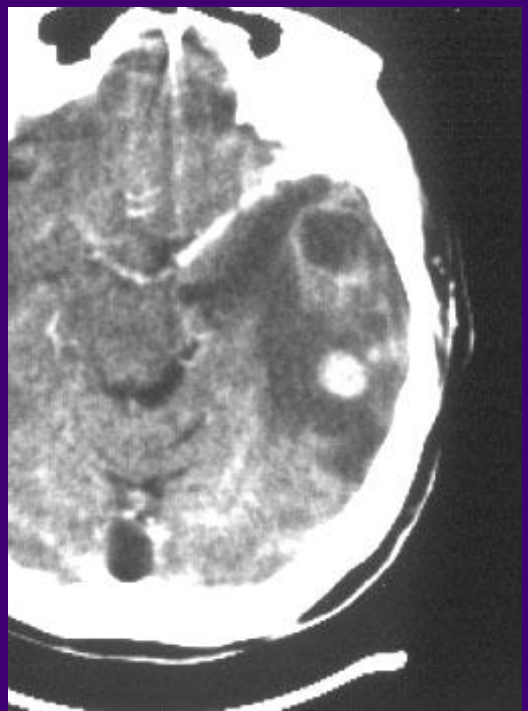
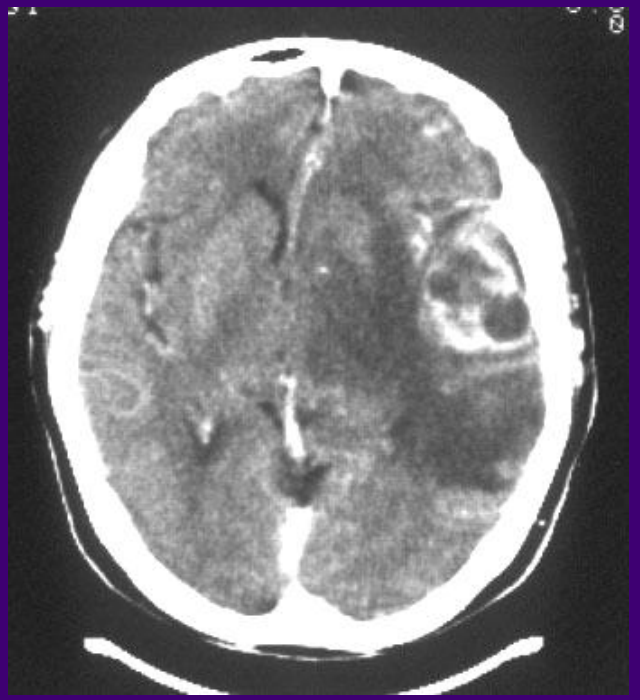
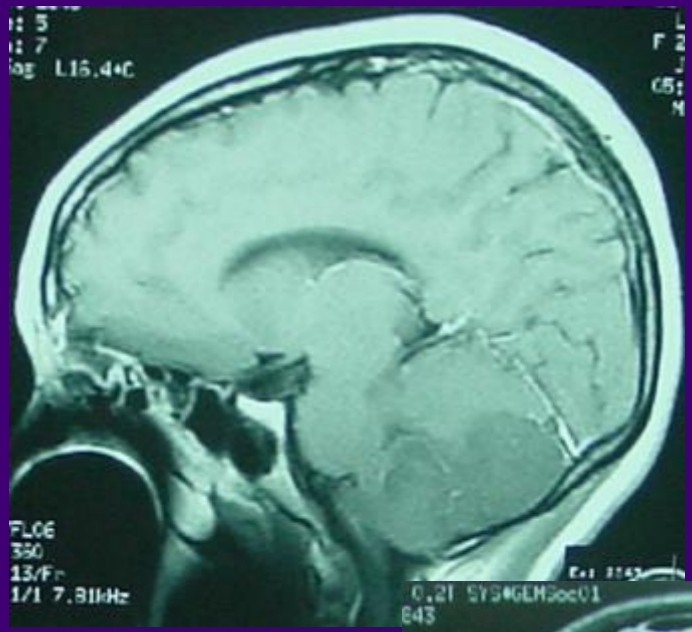


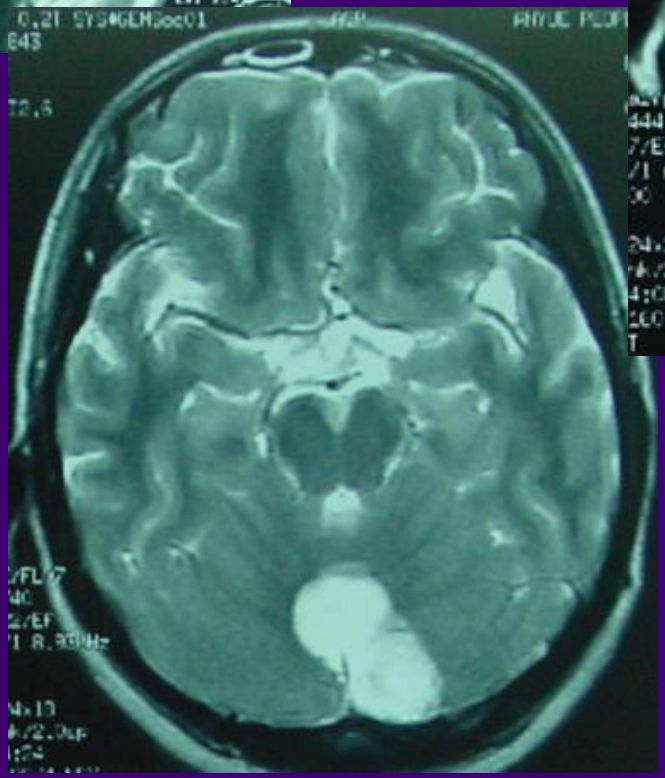


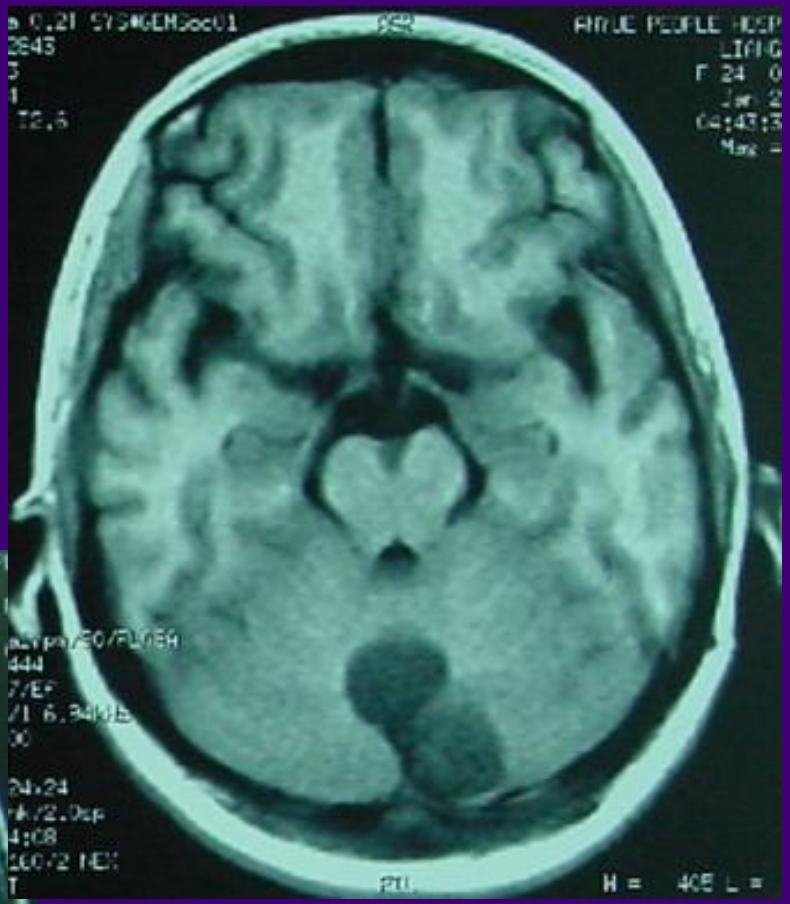




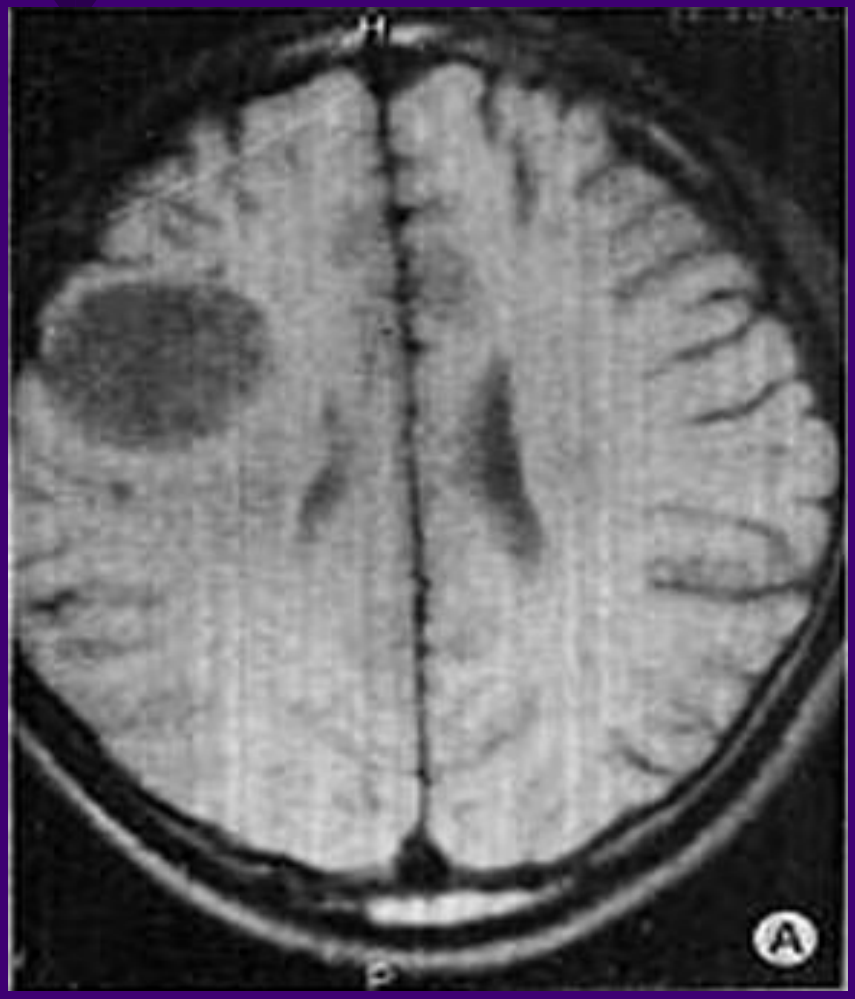


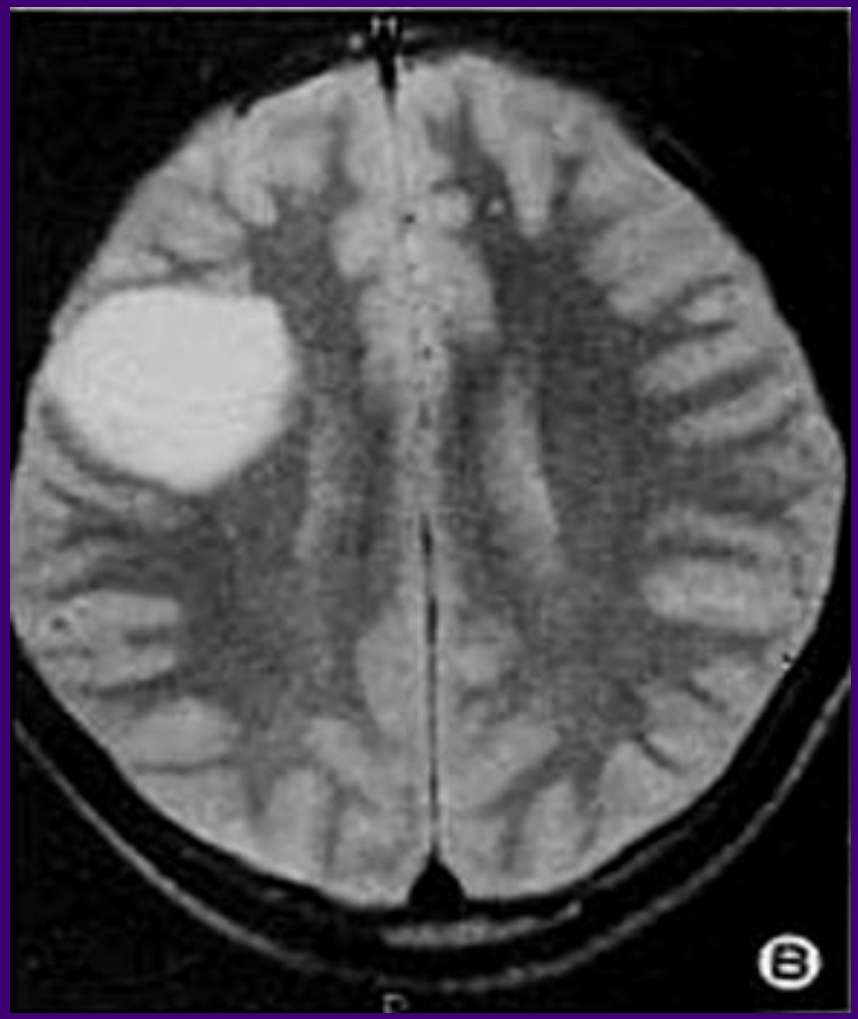


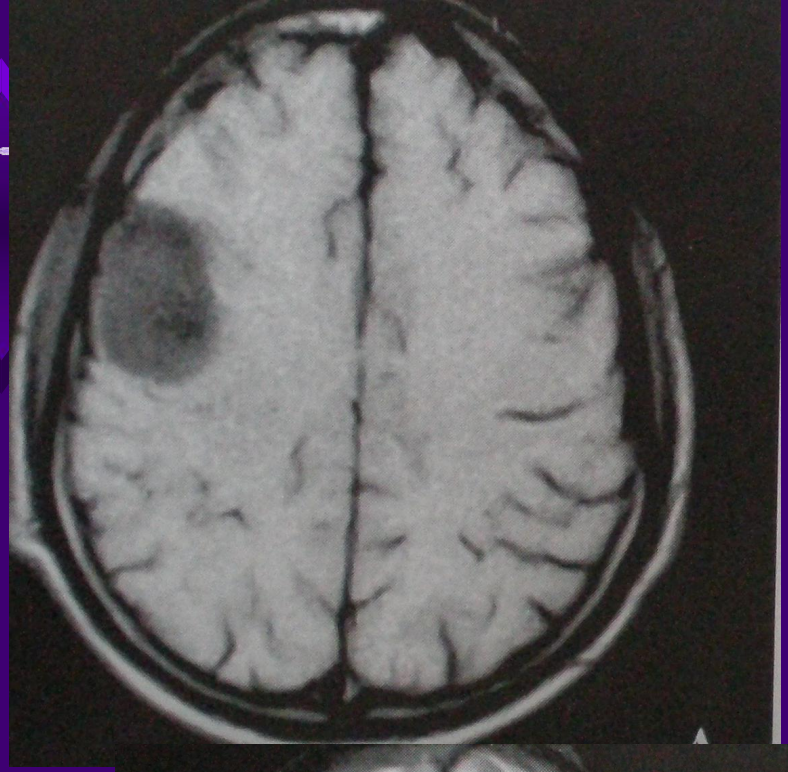


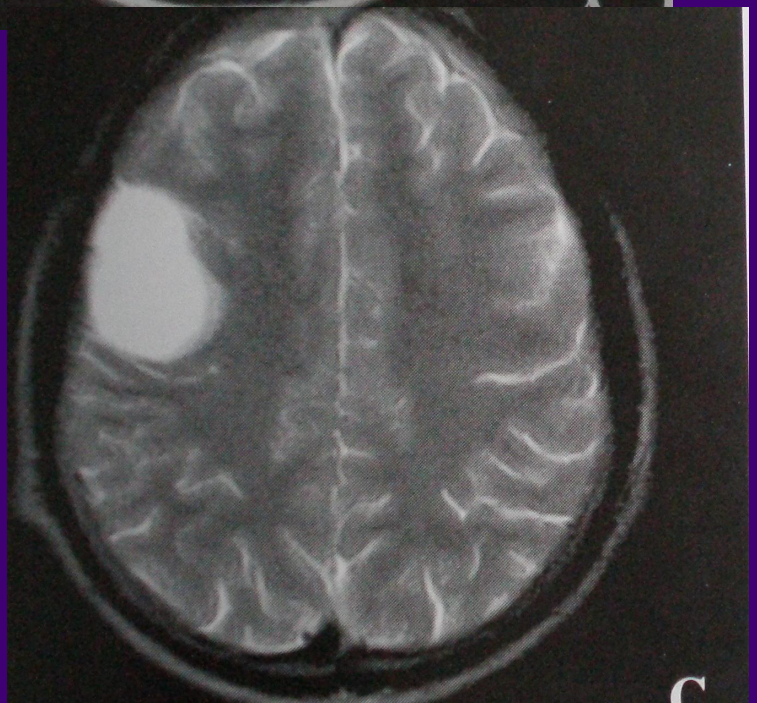


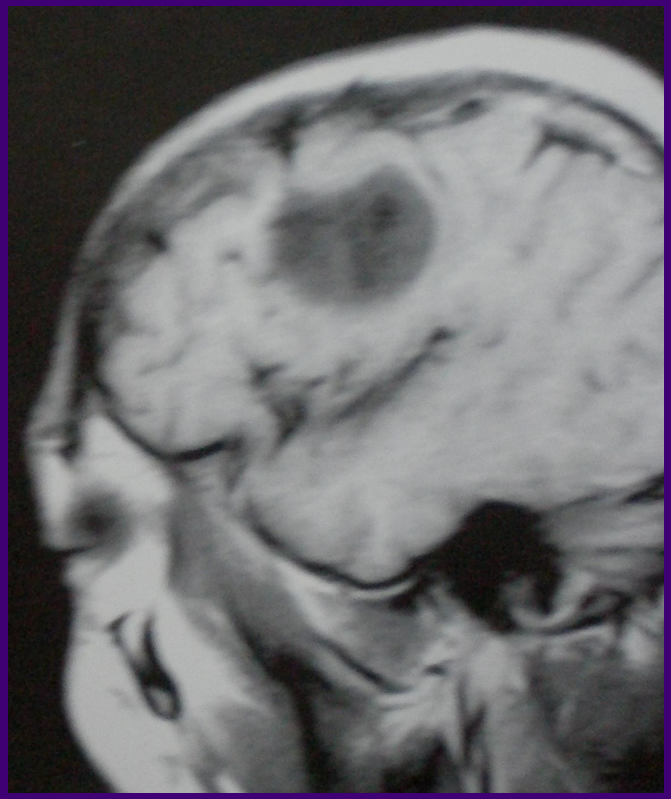
Astrocytoma-MRI findings











星形胶质细胞瘤Ⅰ级

川北医学院附属医院

1.5T 超导磁共振(MRI)检查申请单

姓名 [illegible] 年龄 32 性别 女 体重(kg) 科别 [illegible] 门诊号 住院号 CT号

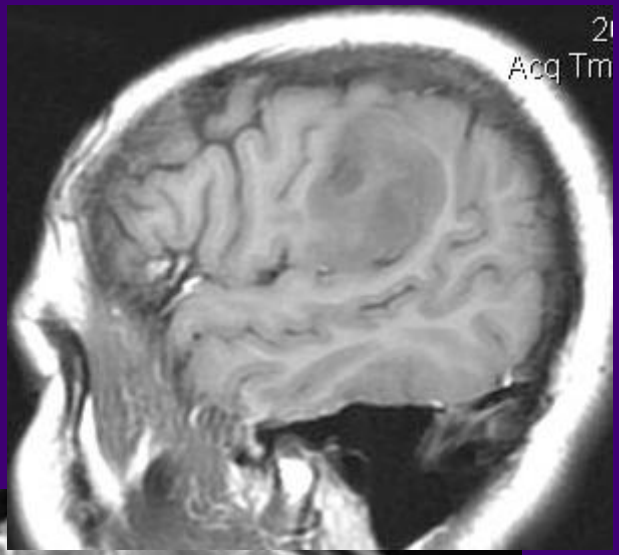
MRI号 24248(3) 住址 工作单位 职业

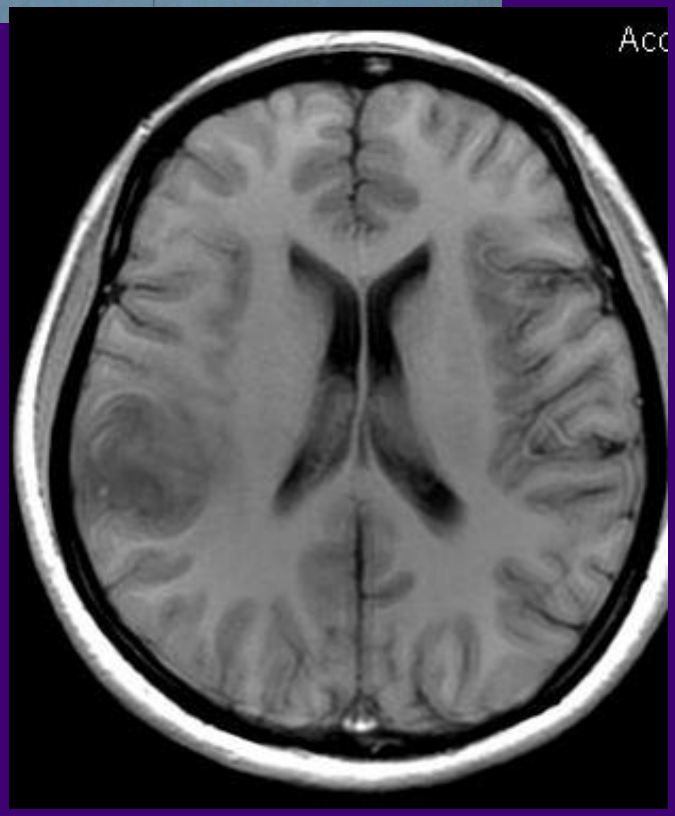
临床症状和体征：

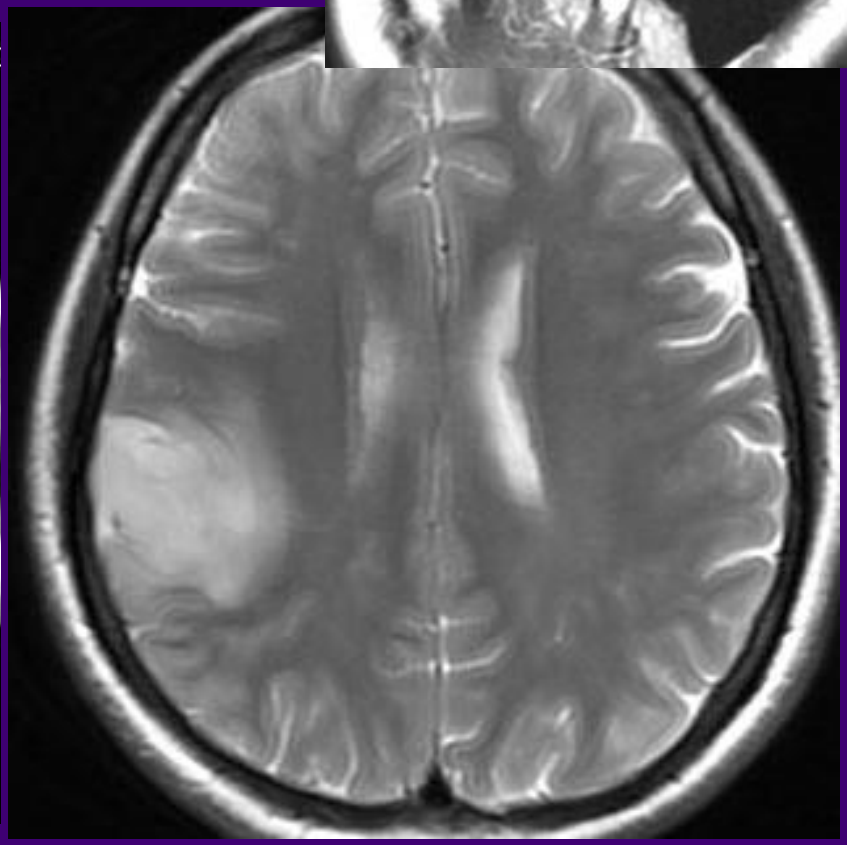
[illegible]

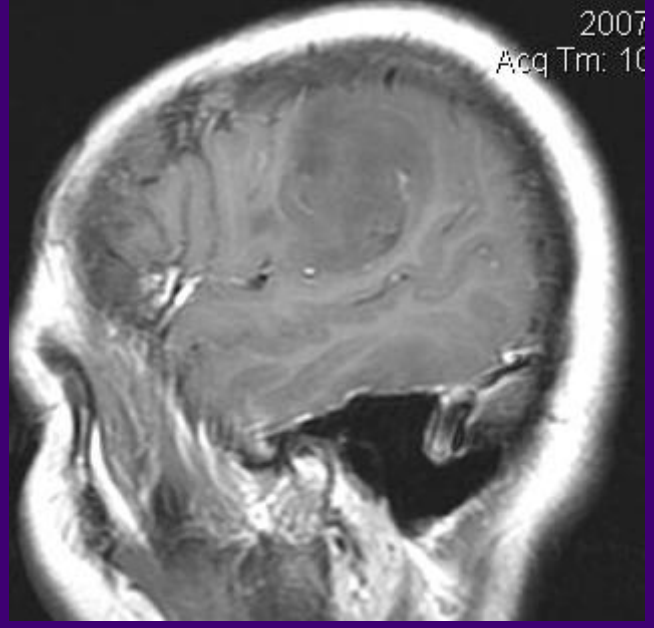
临床诊断：[illegible]

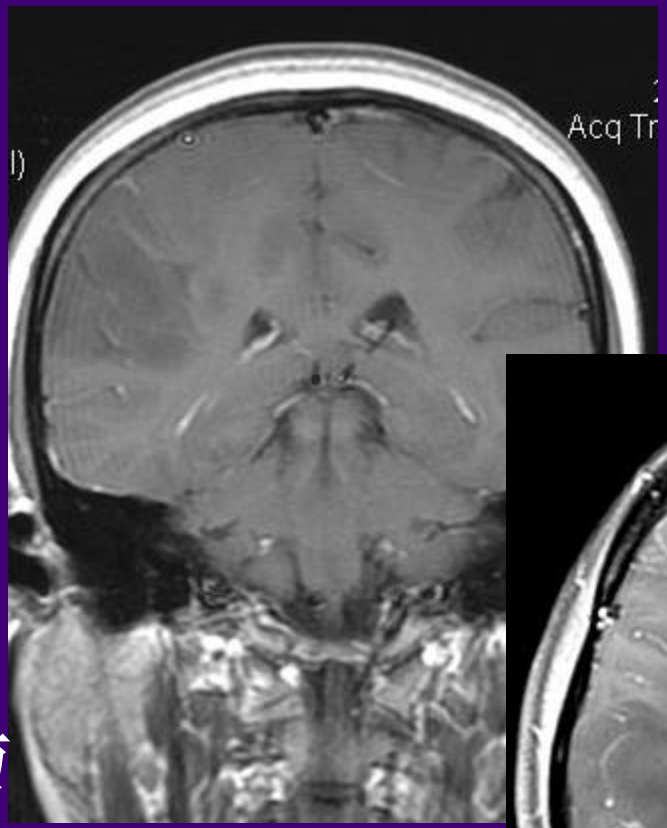
检查部位及要求：[illegible]

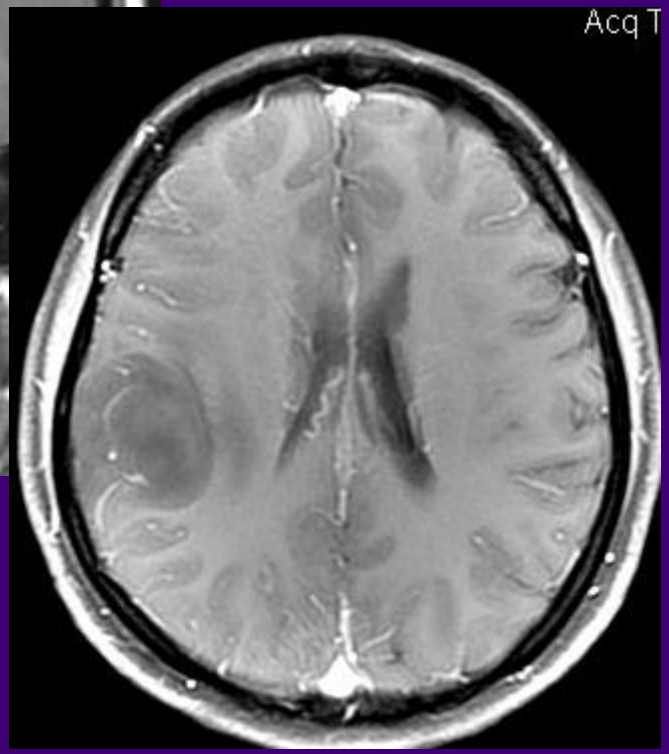




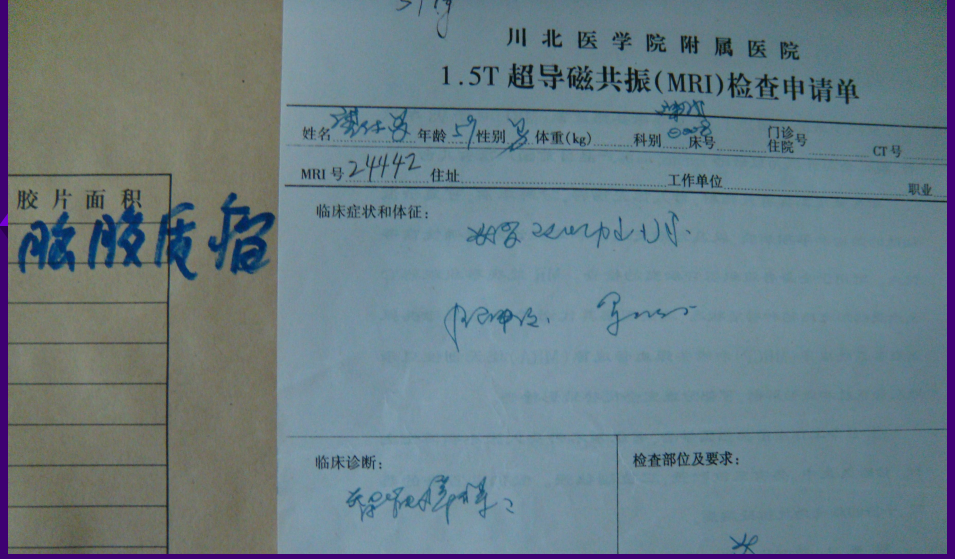








II级胶质瘤



川北医学院附属医院

1.5T 超导磁共振(MRI)检查申请单

姓名 年龄 性别 体重(kg) 科别 床号 门诊 住院号 CT号

MRI号 2442 住址 工作单位 职业

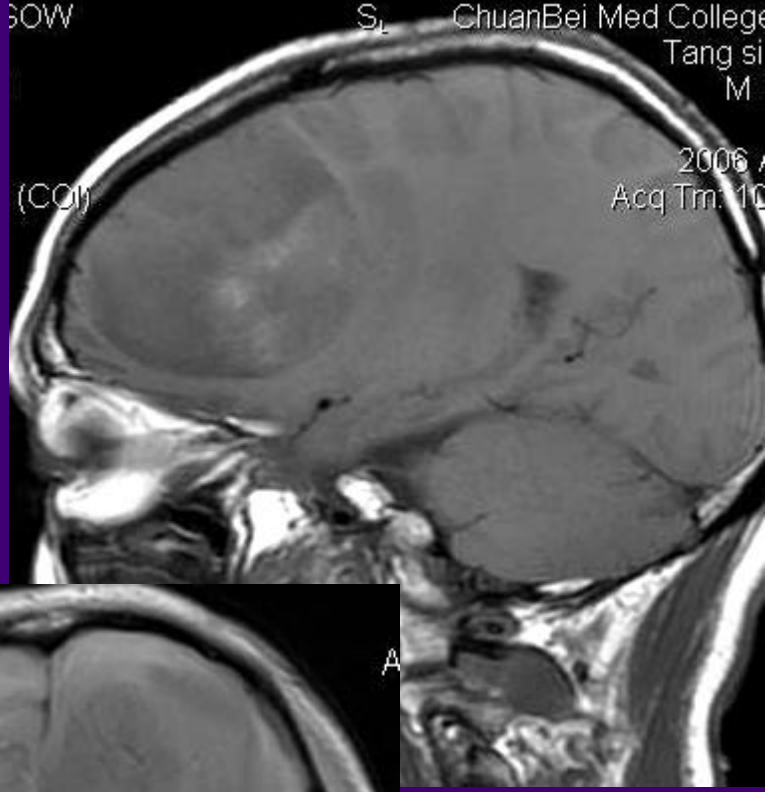
临床症状和体征：

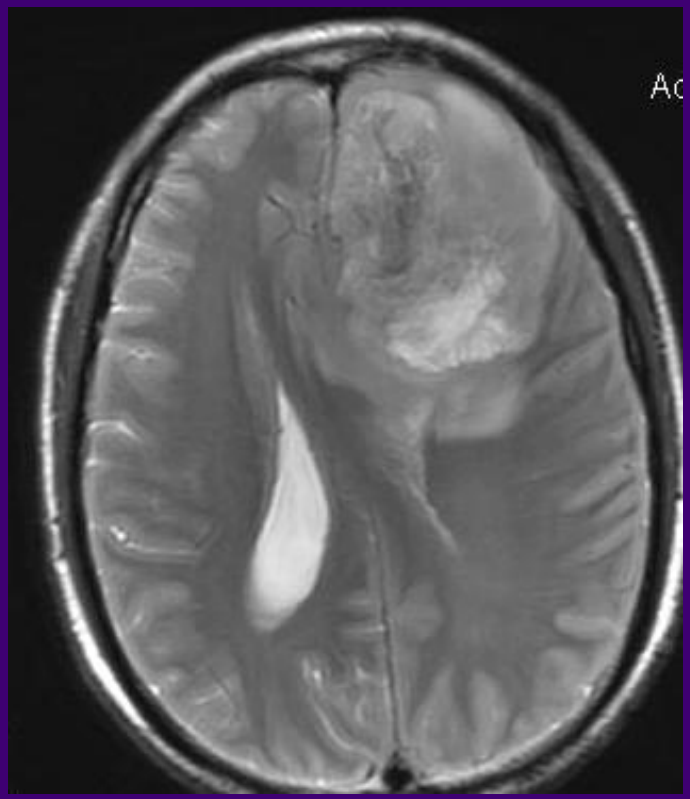
临床诊断：

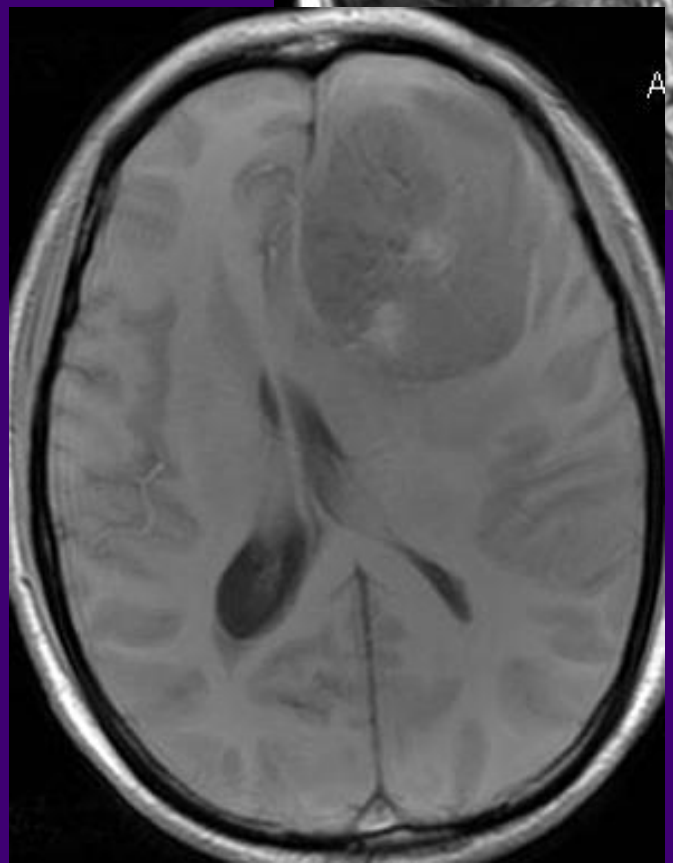
检查部位及要求：

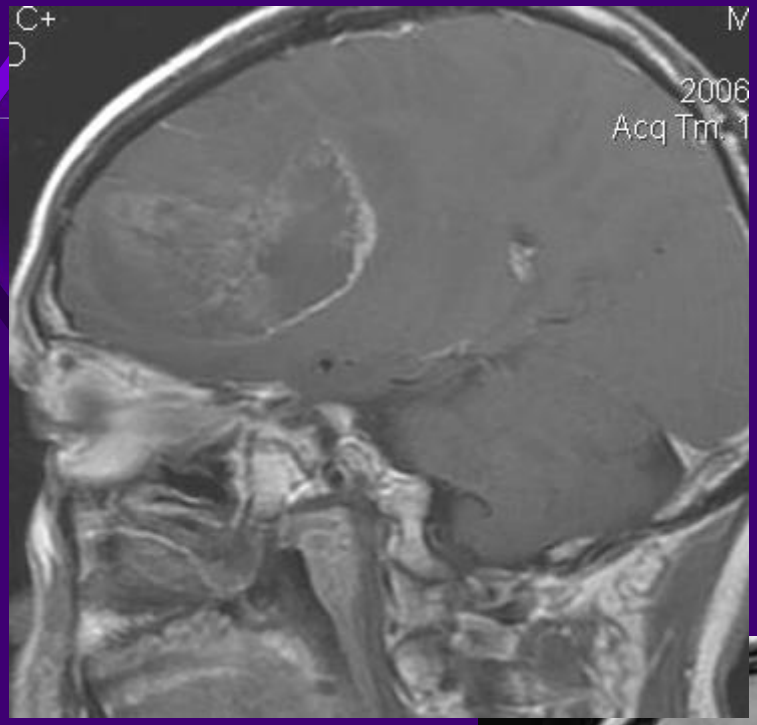
胶片面积

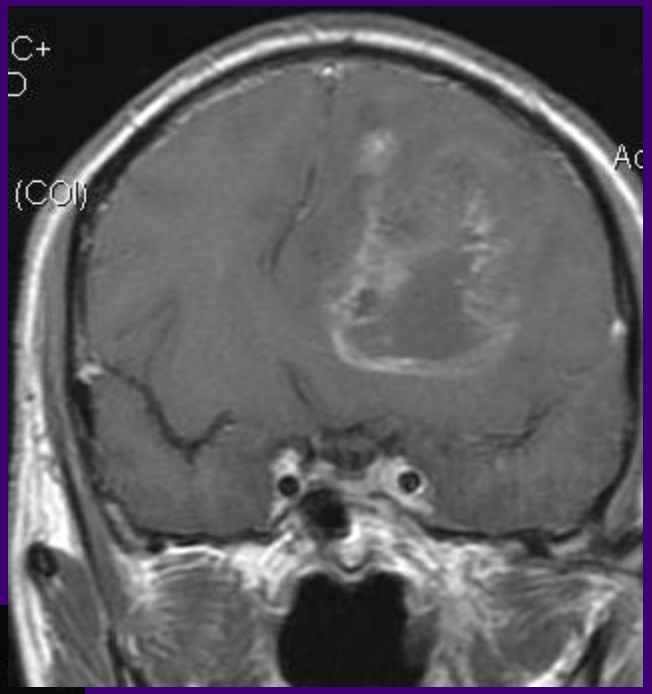
脑胶质瘤

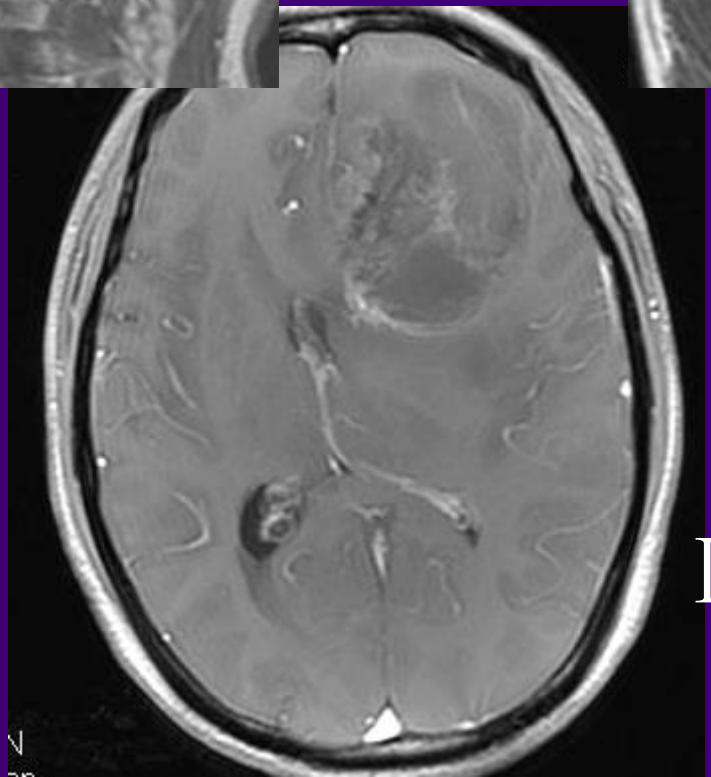












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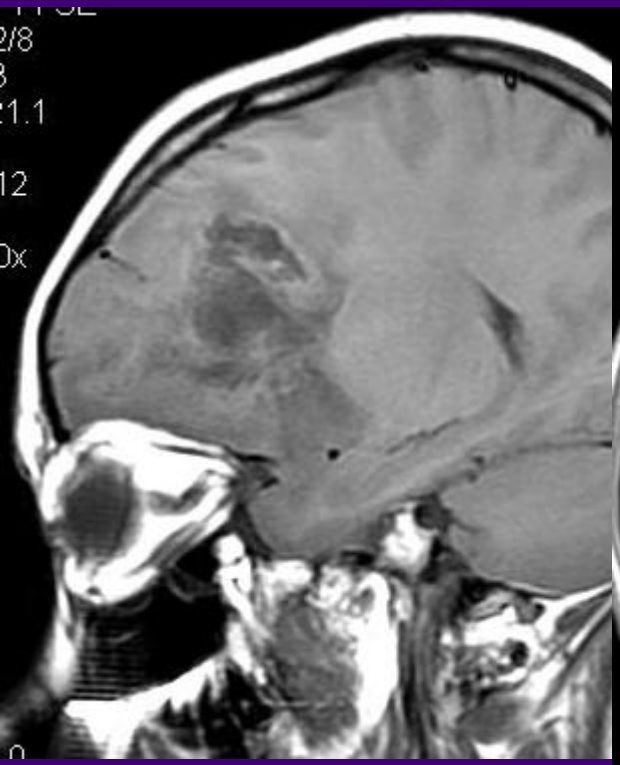

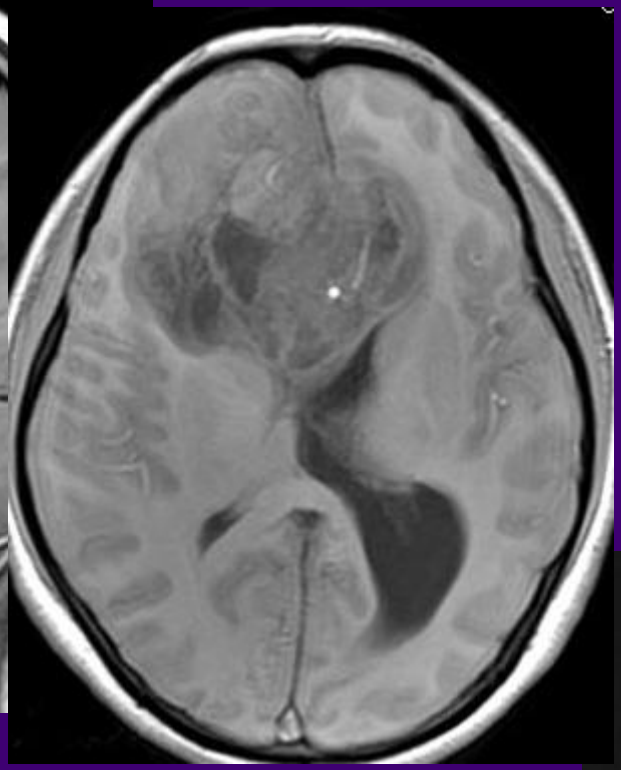

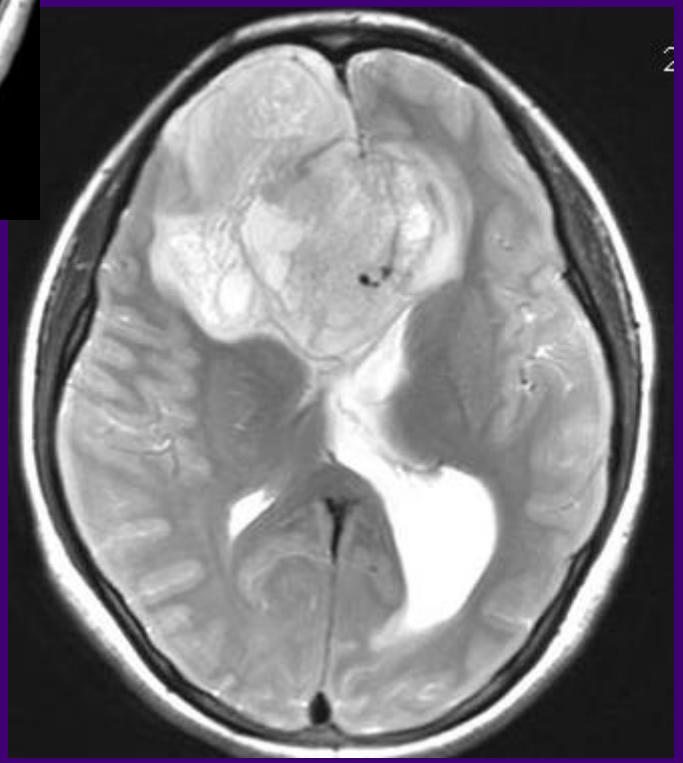

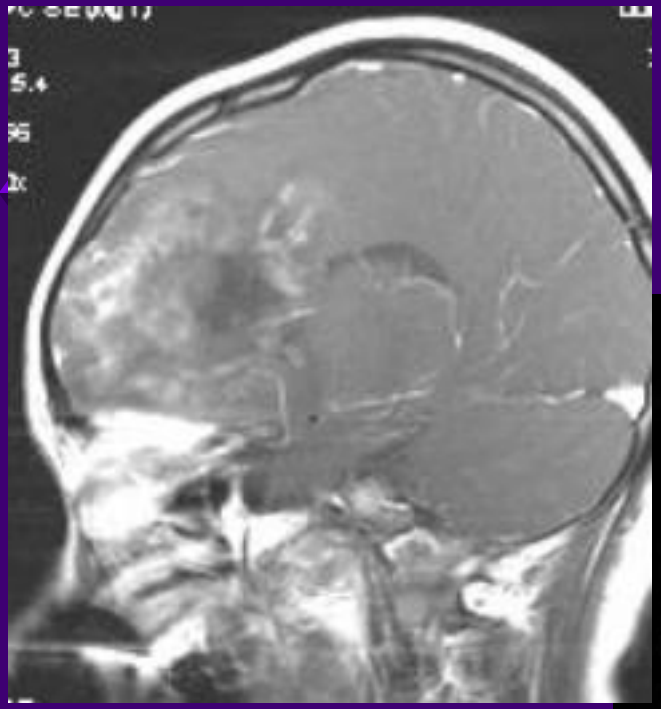

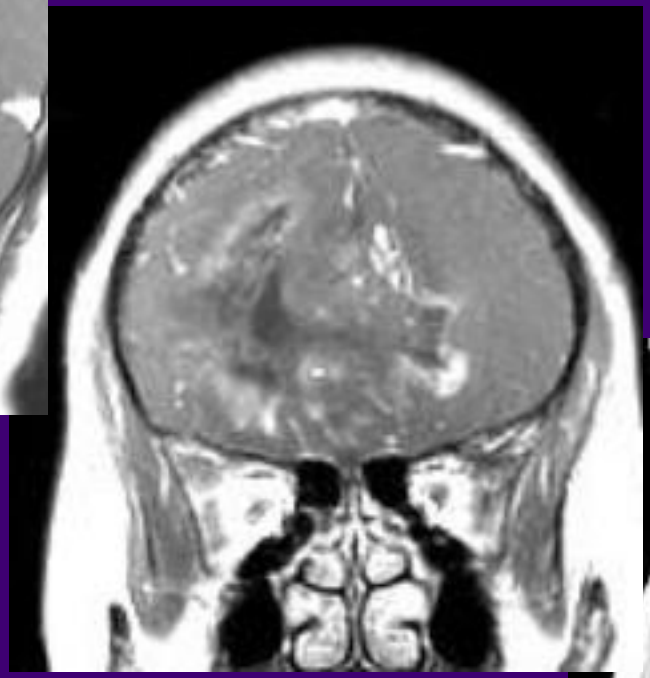

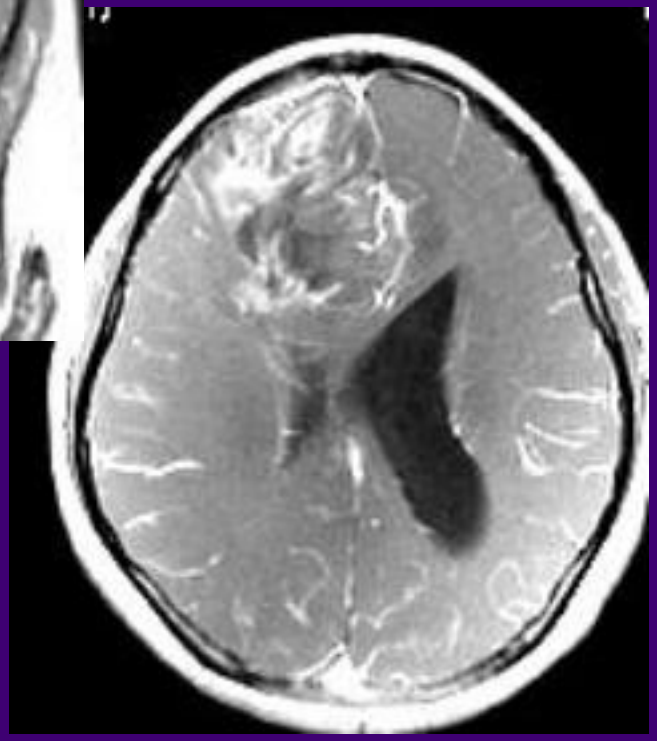

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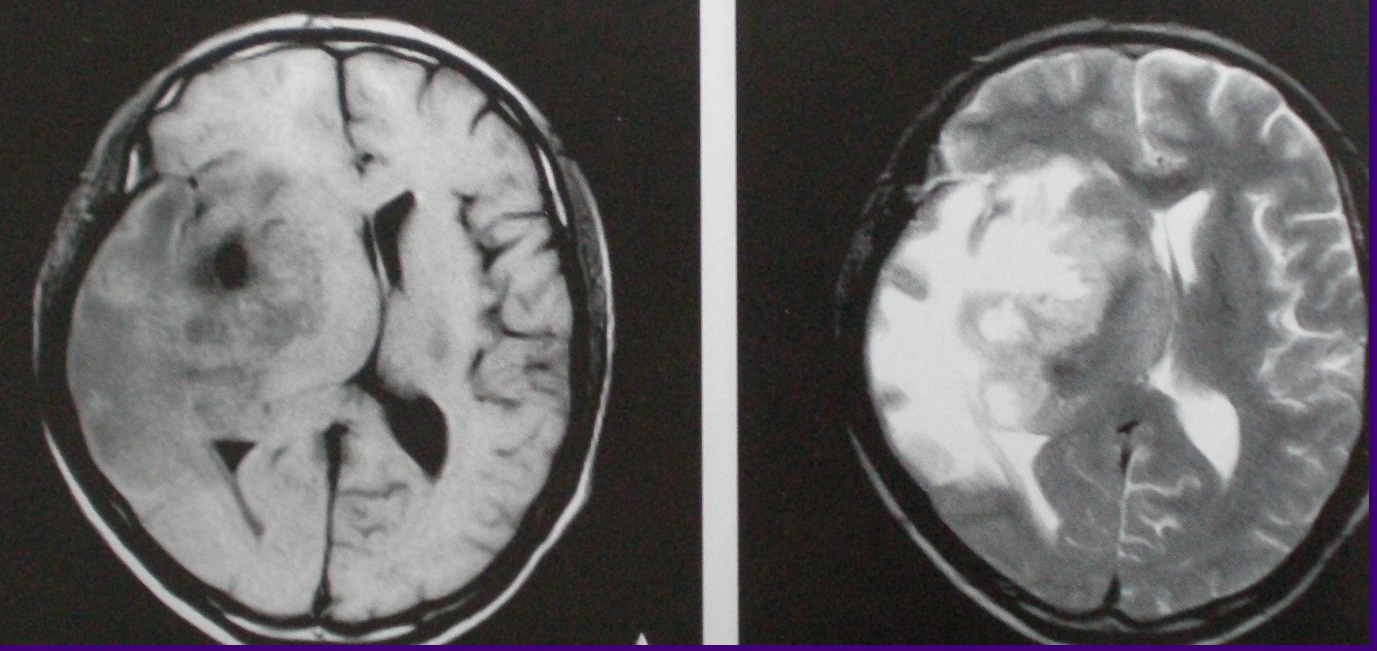

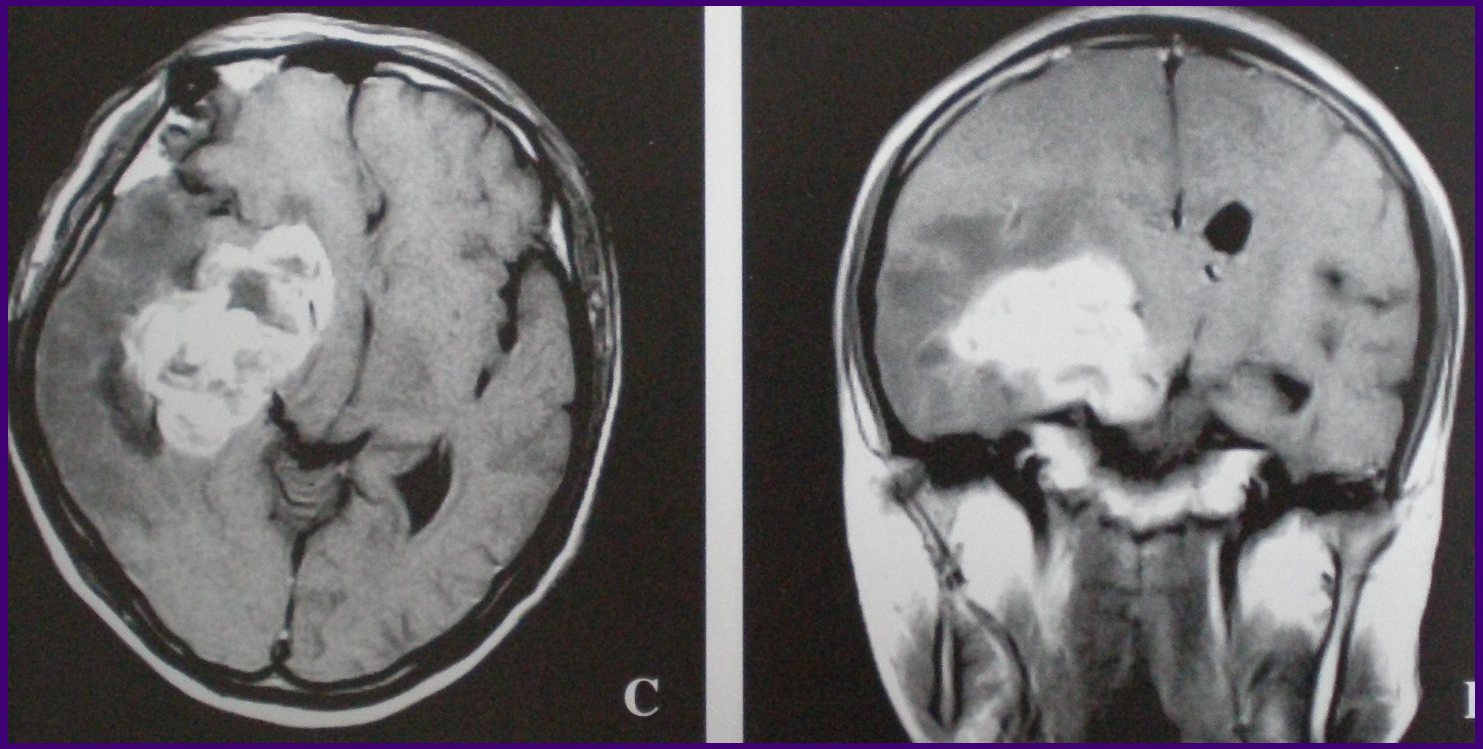

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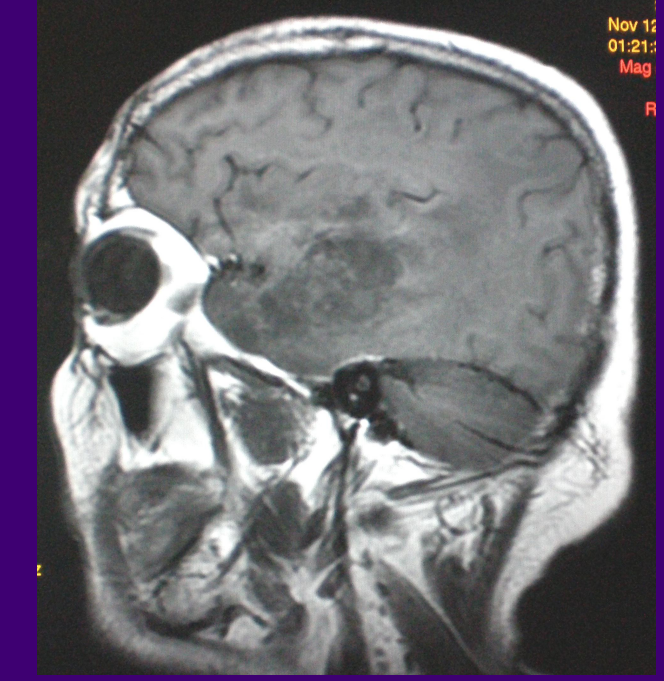
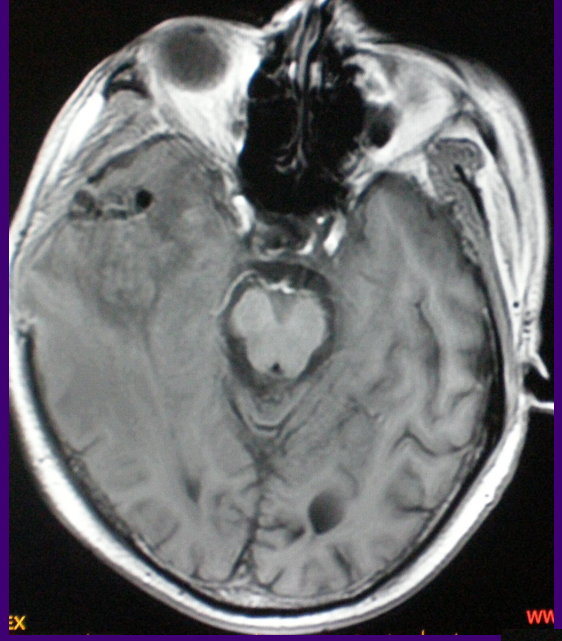
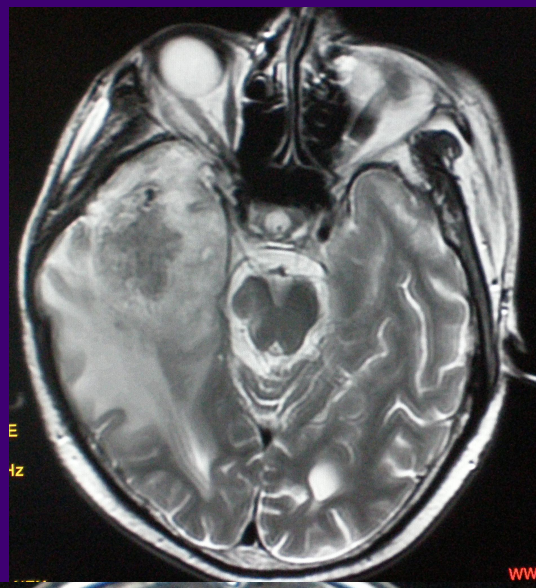
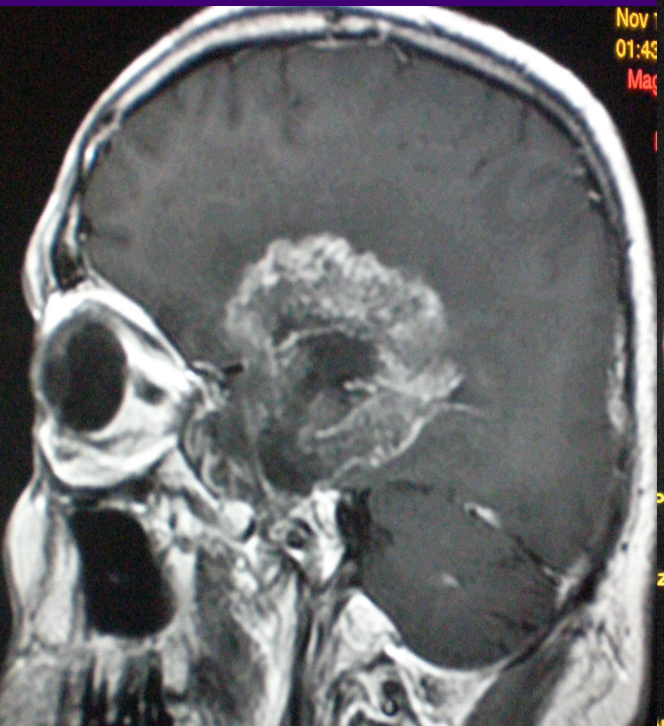
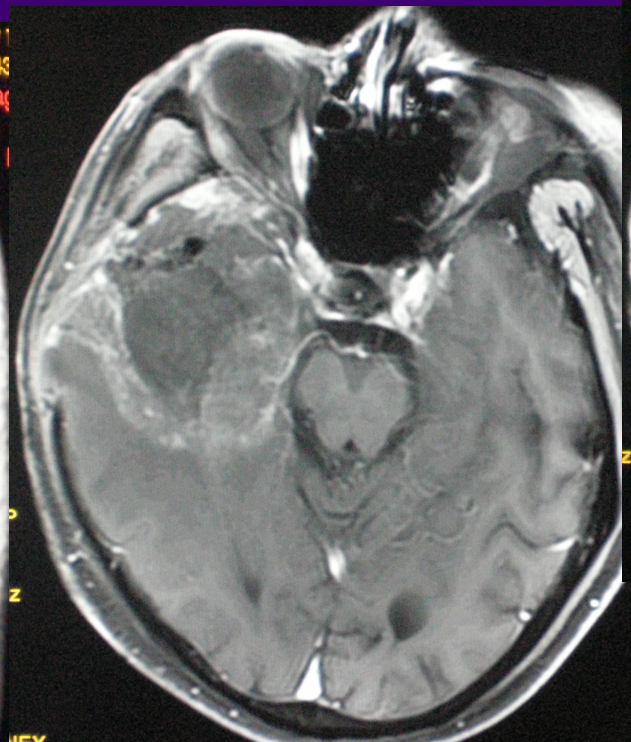
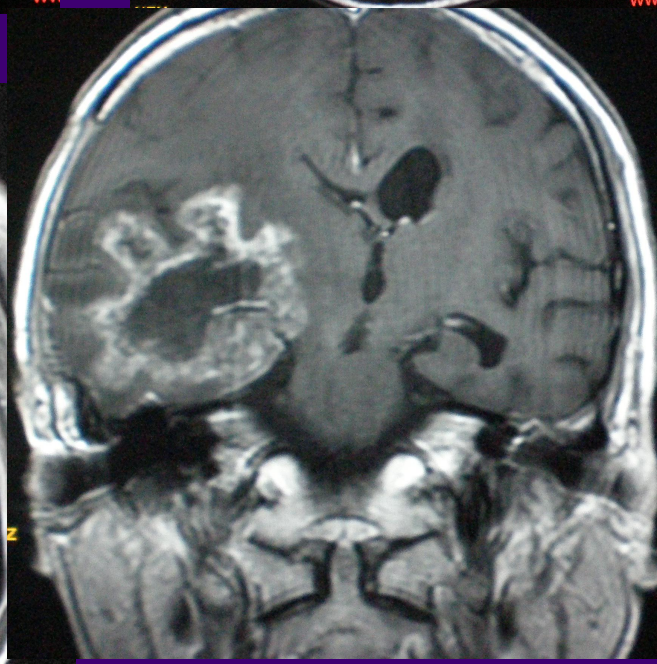
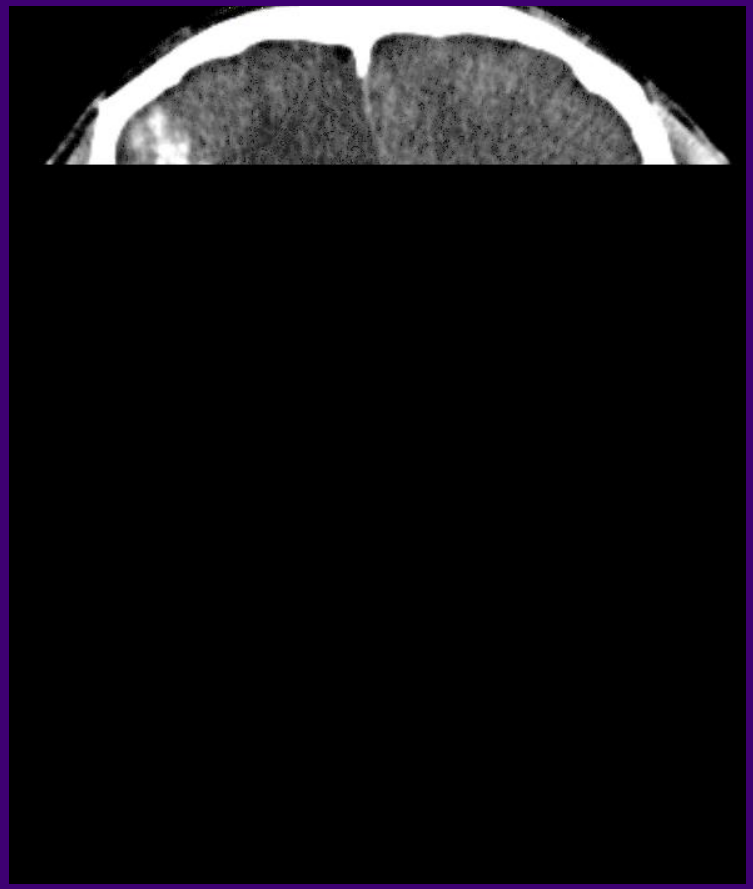
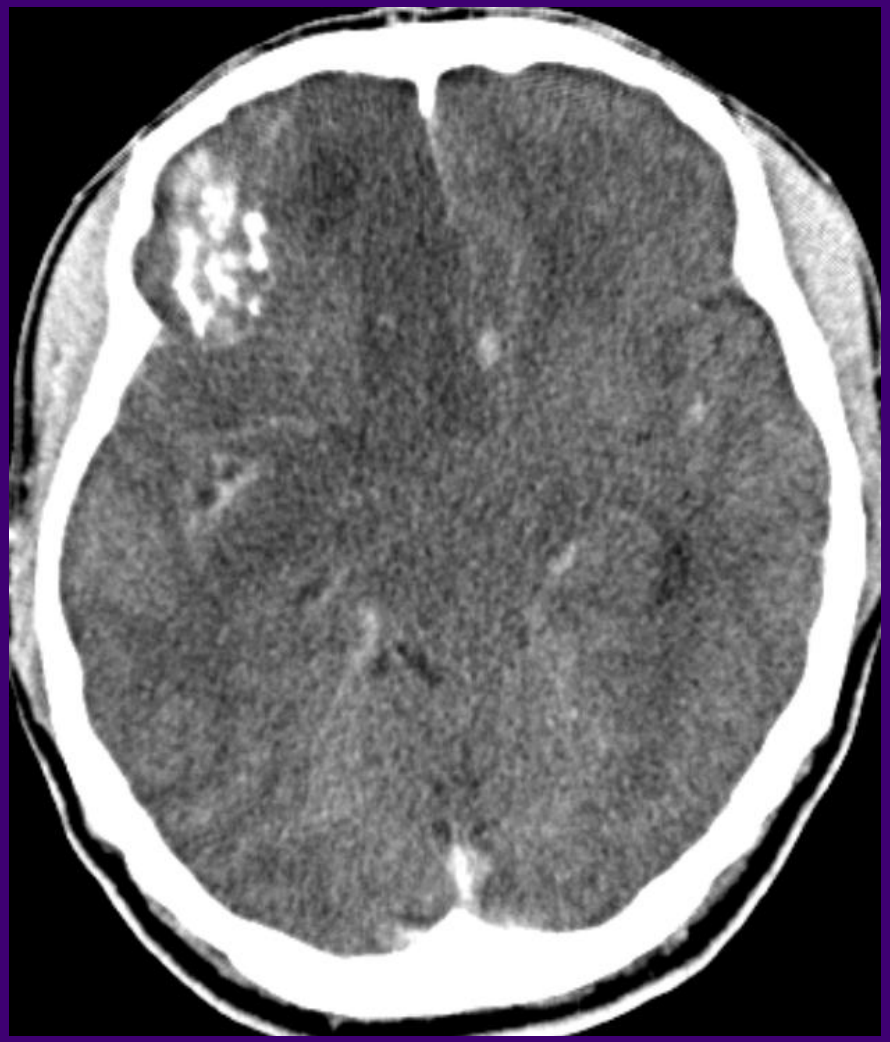
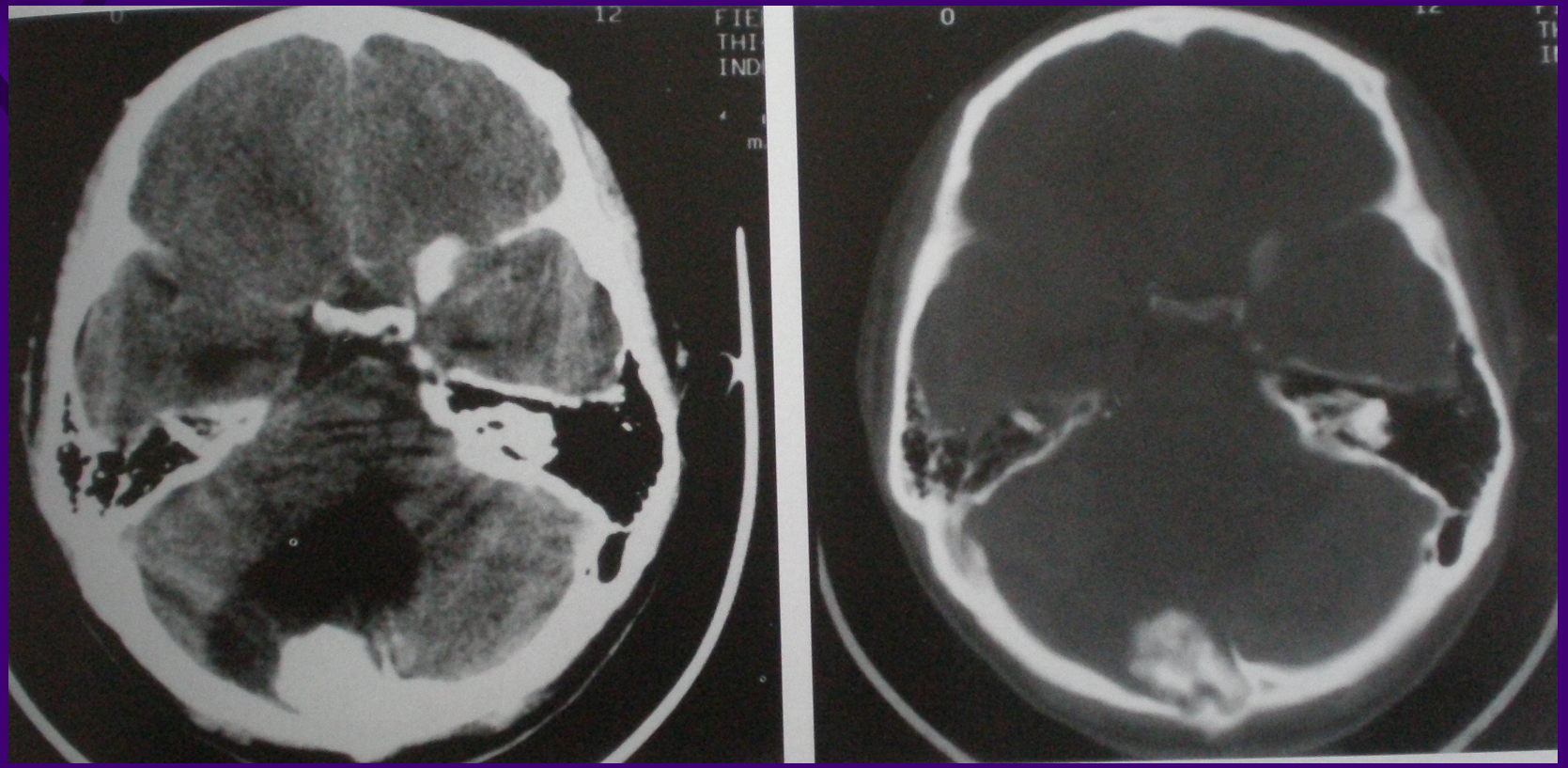







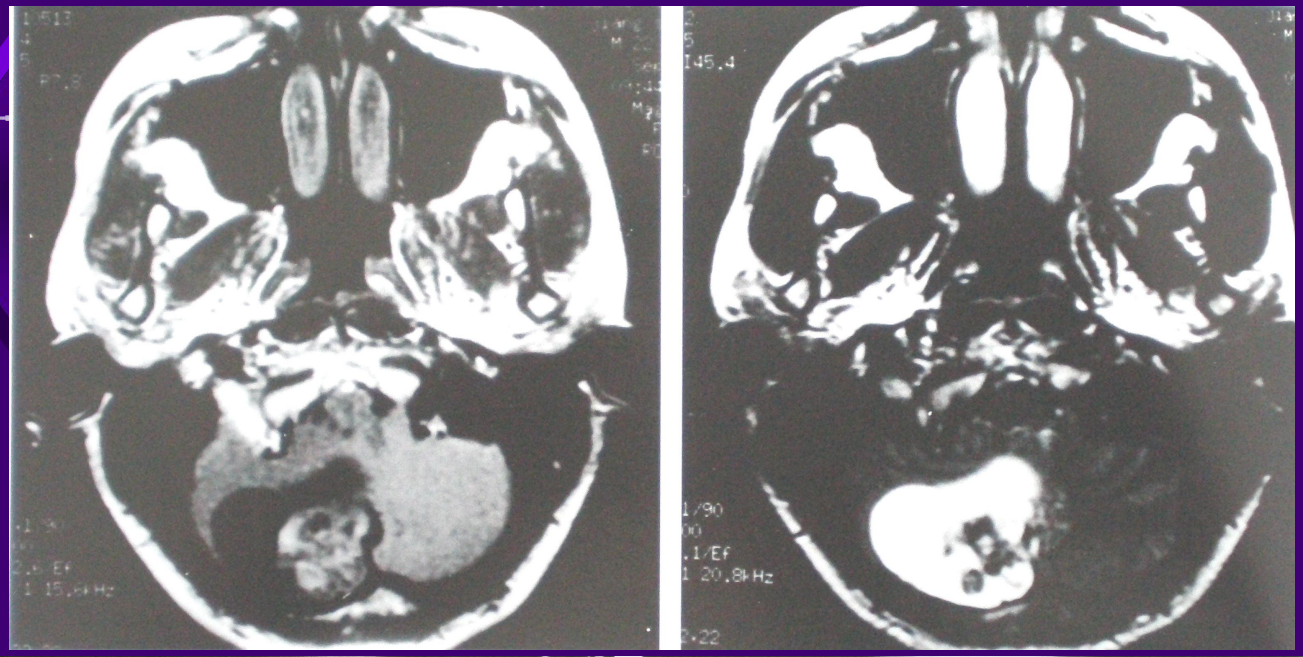
胶质母细胞瘤

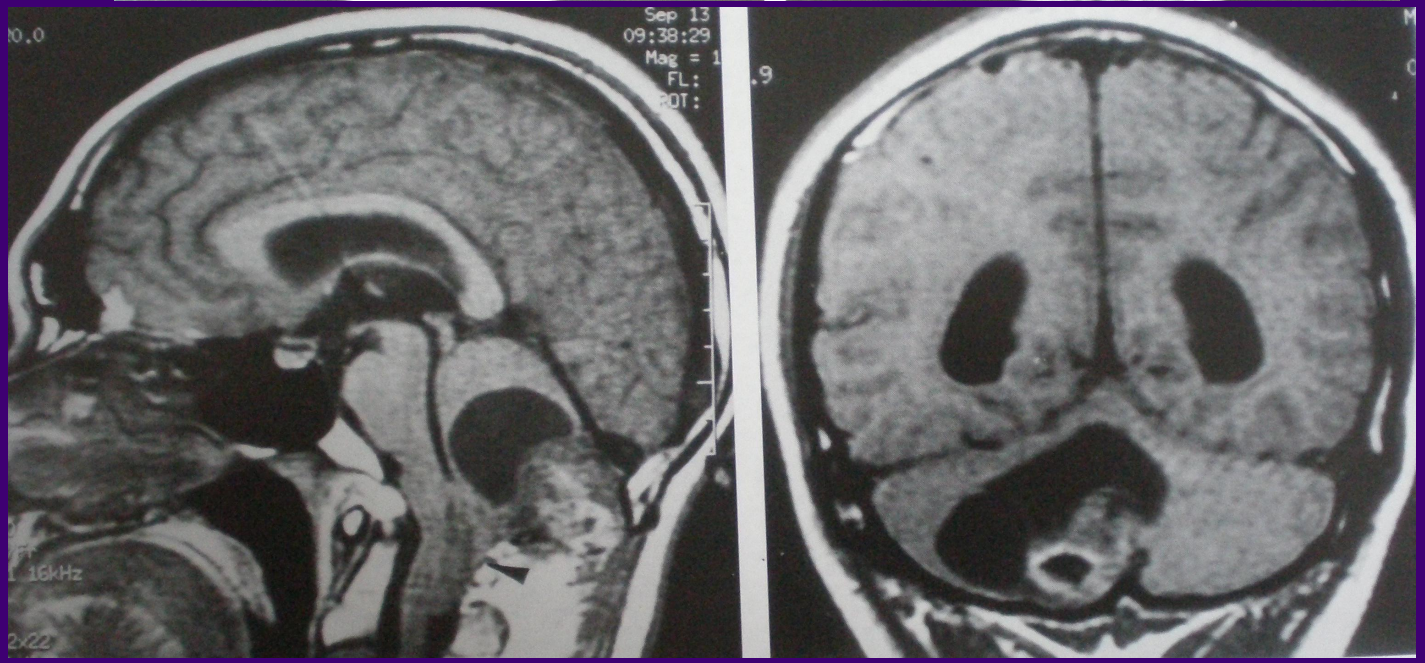
少枝胶质瘤








1/90
.1/Ef
1 20.8kHz

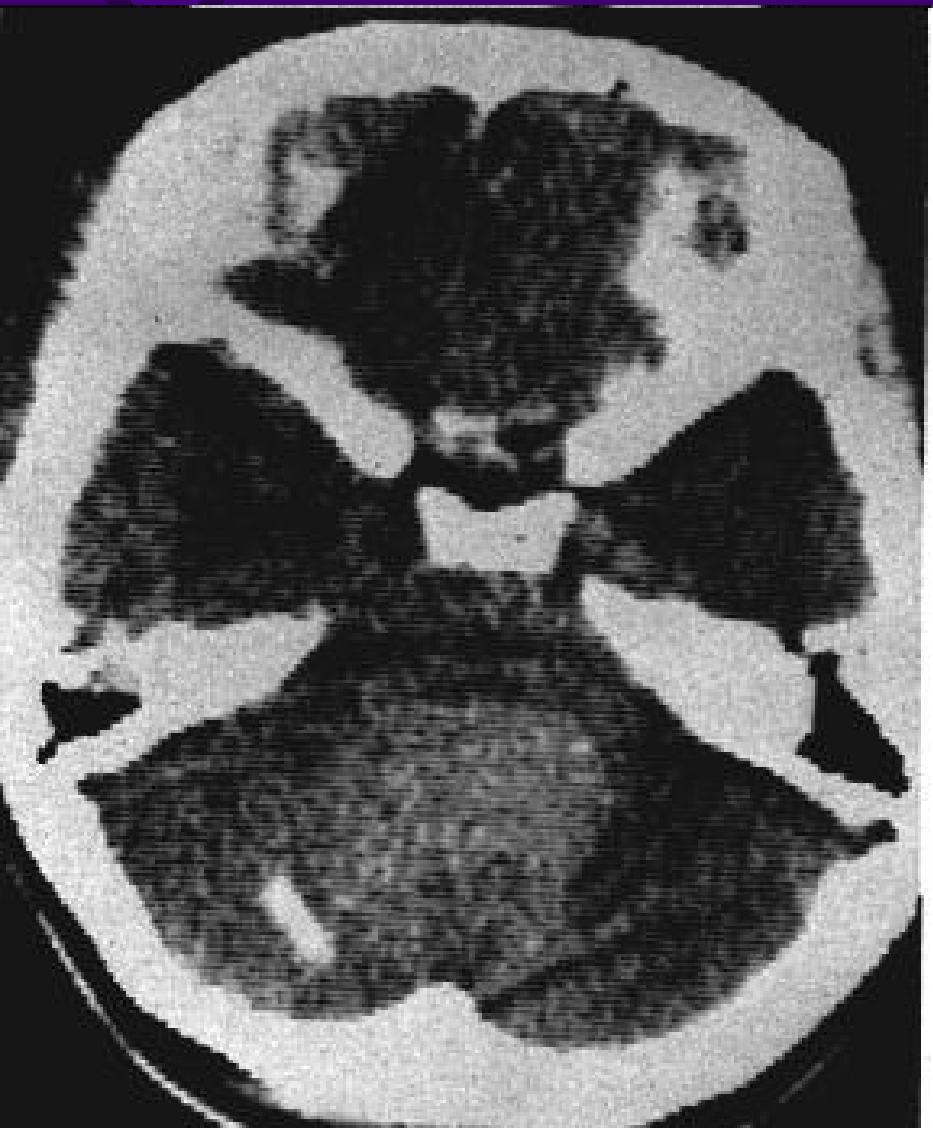

Sep 13
09:38:29
Mag = 1
FL:
ROT:
16kHz

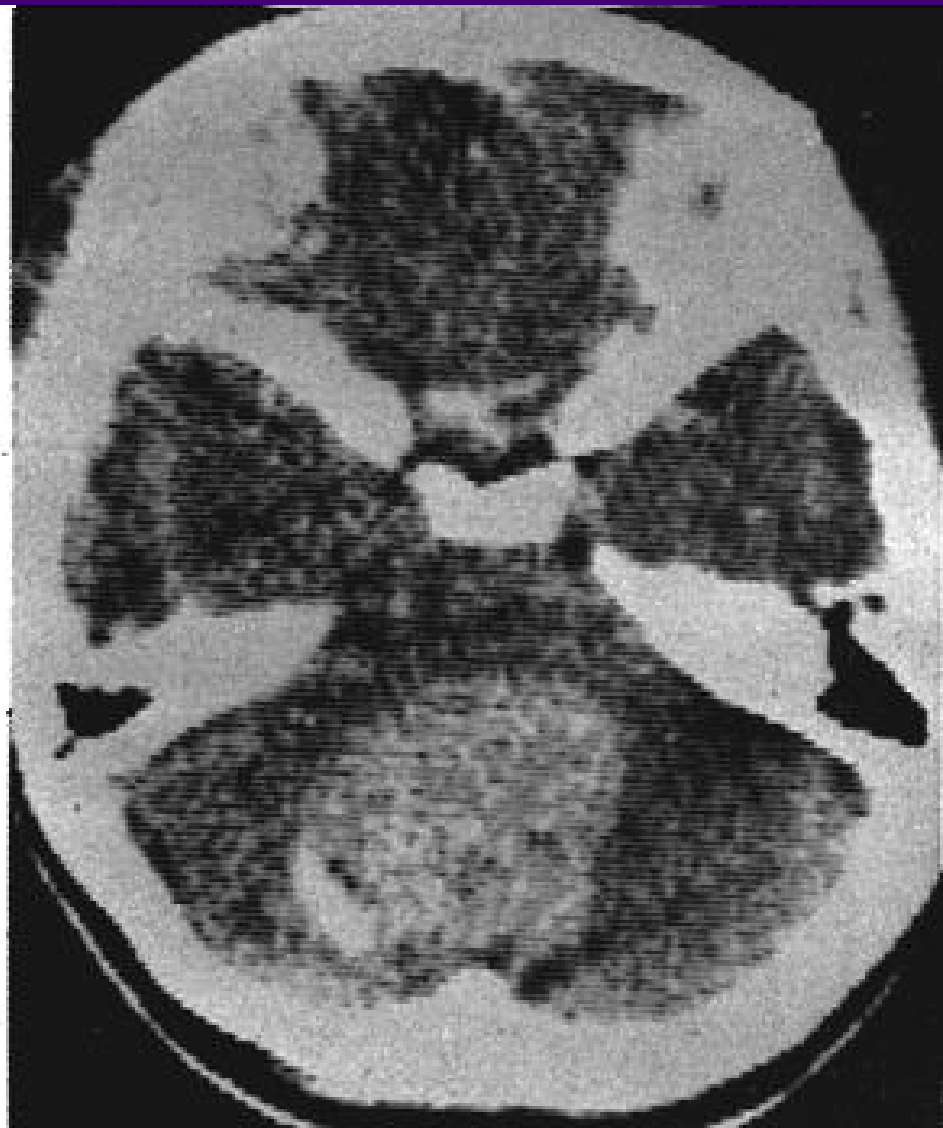
髓母细胞瘤medulloblastoma

占颅内肿瘤的1.84~6.54%。占胶质瘤的4-8%。主要发生于小儿（20岁以内），其次为成人。

男女发病比例2-3：1。

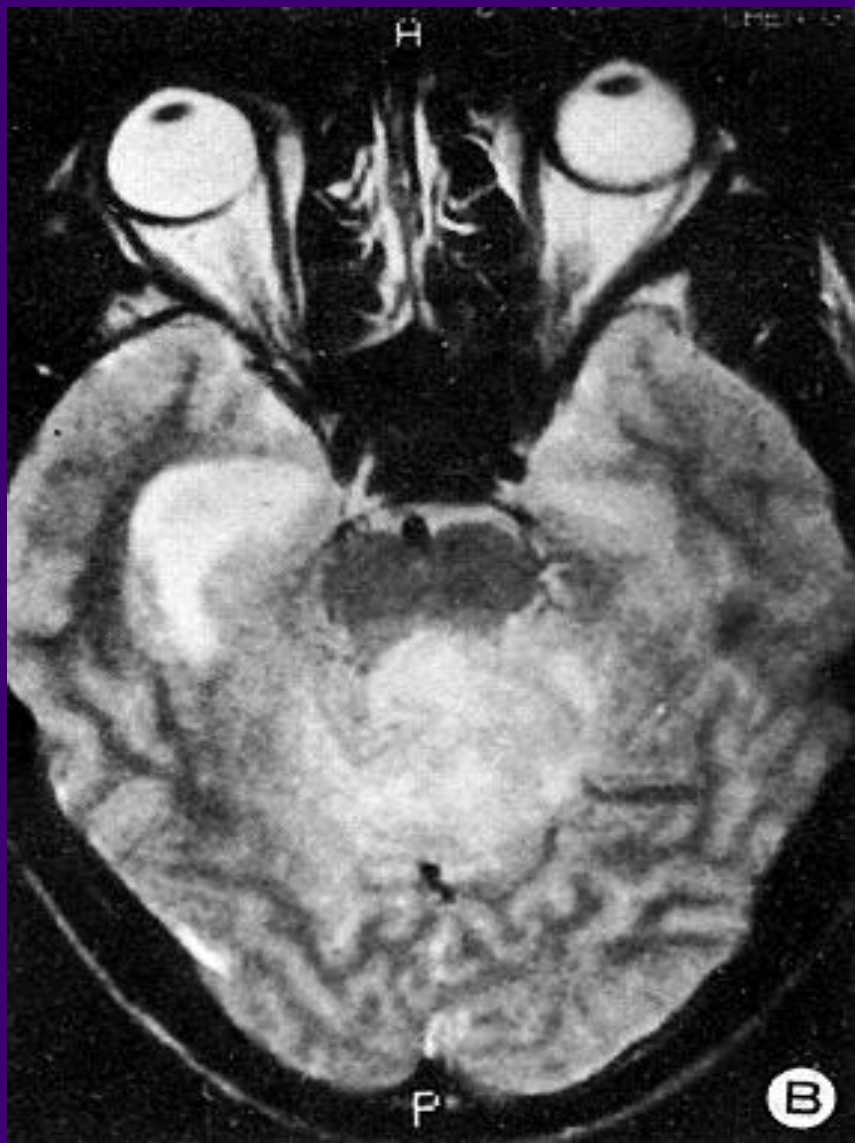
髓母细胞瘤—CT表现

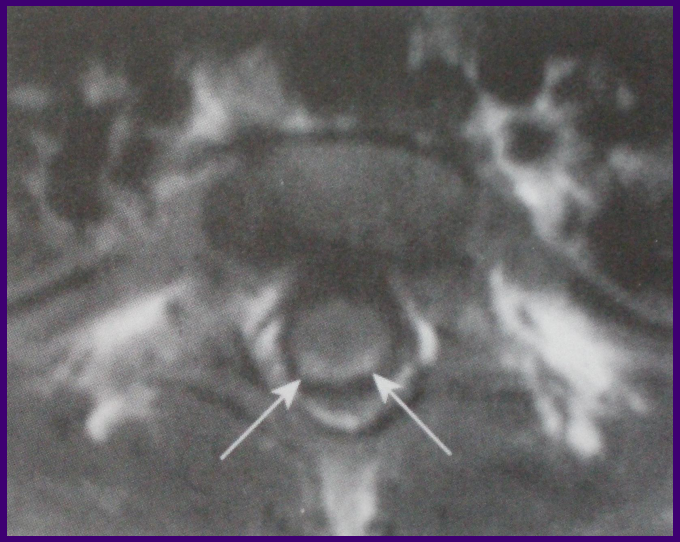


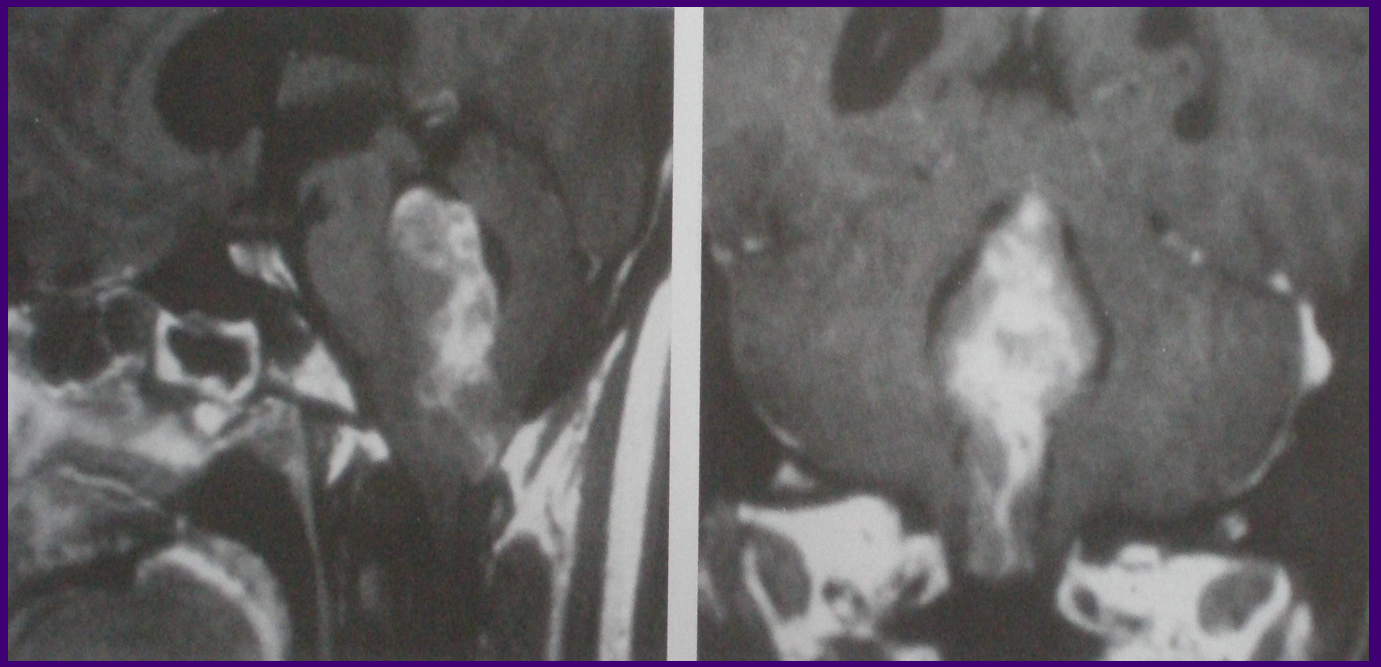


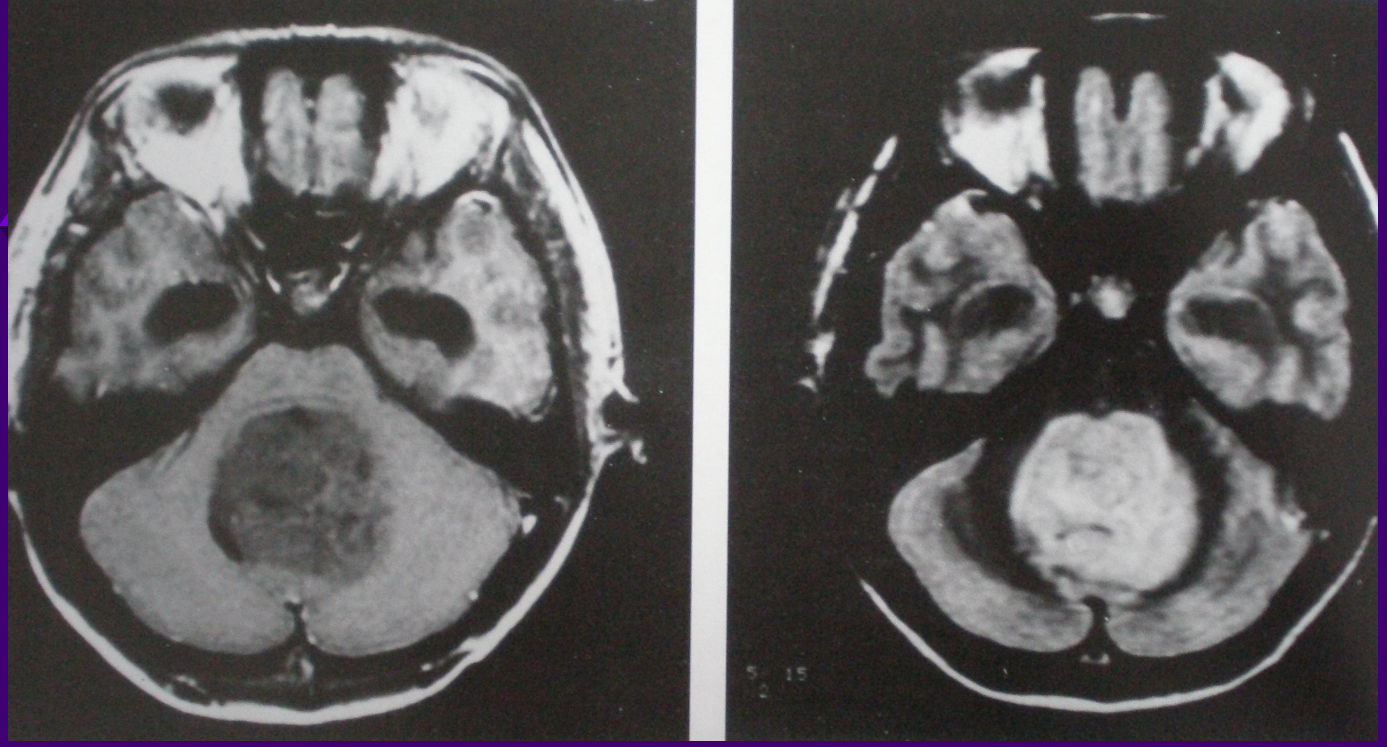
髓母细胞瘤－MRI表现

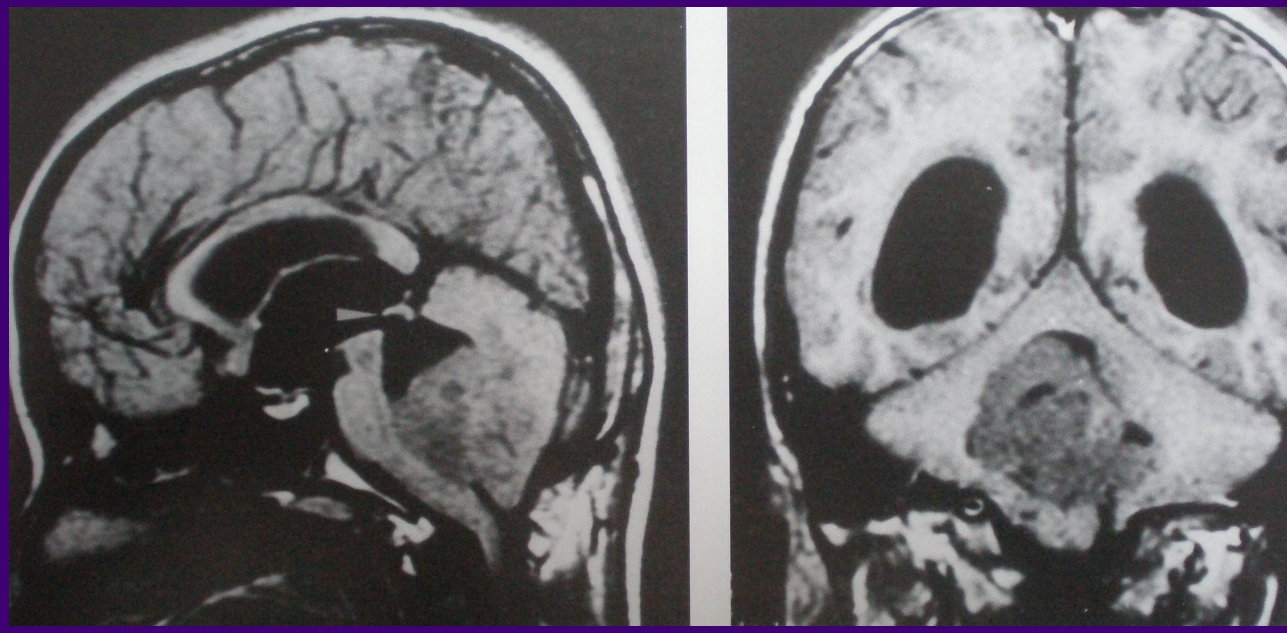
T1WI肿瘤为低信号
T2WI为等或高信号
Gd-DTPA可强化

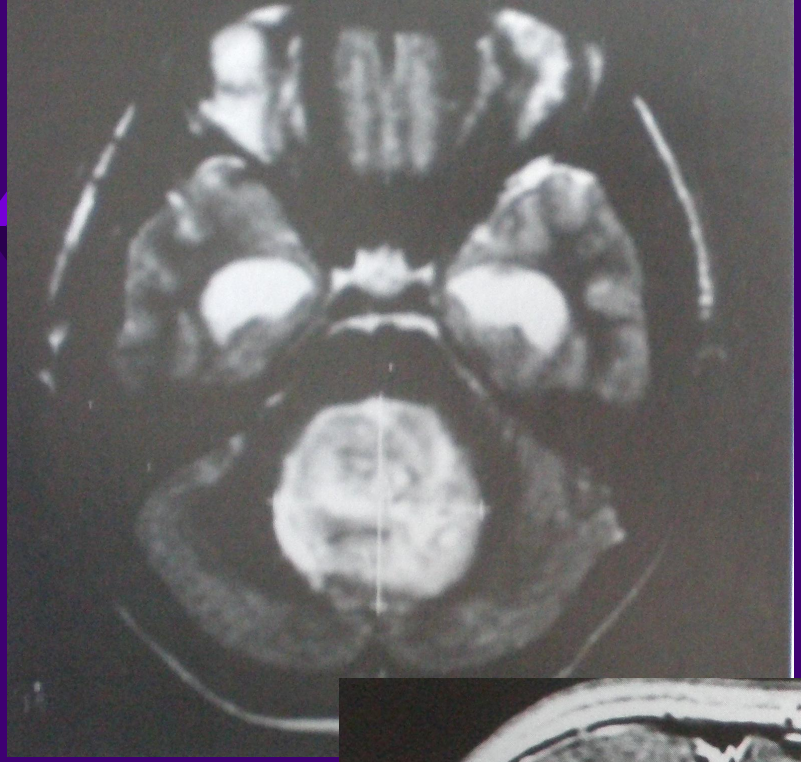


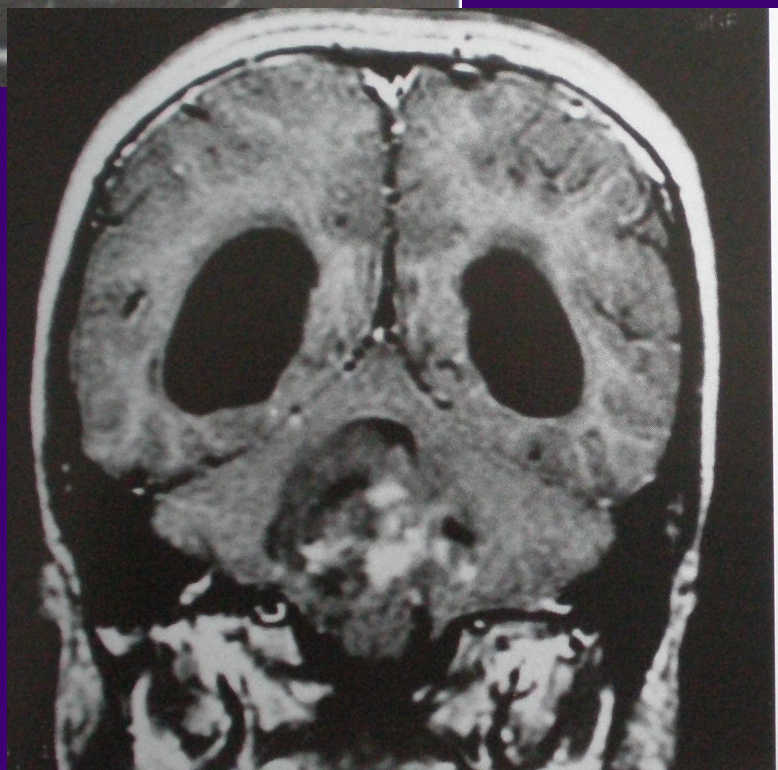


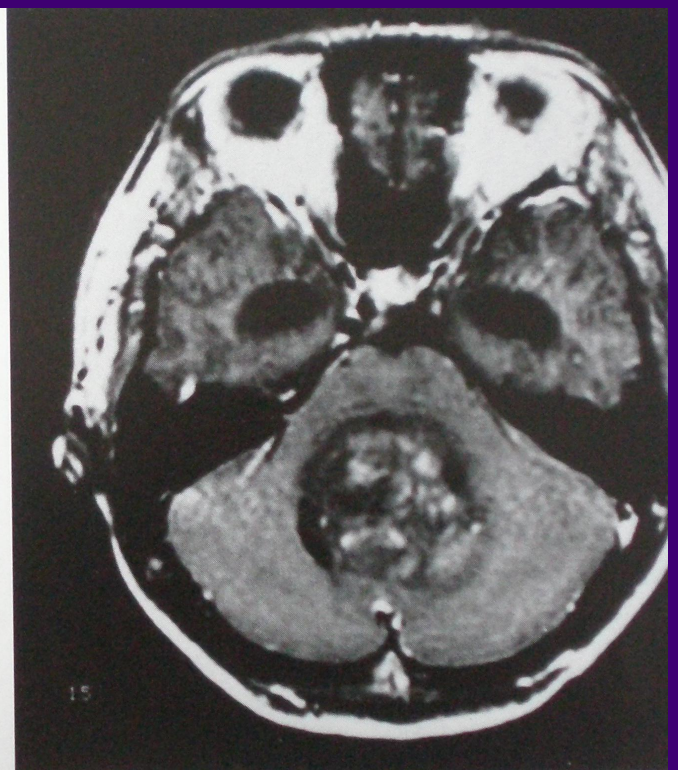








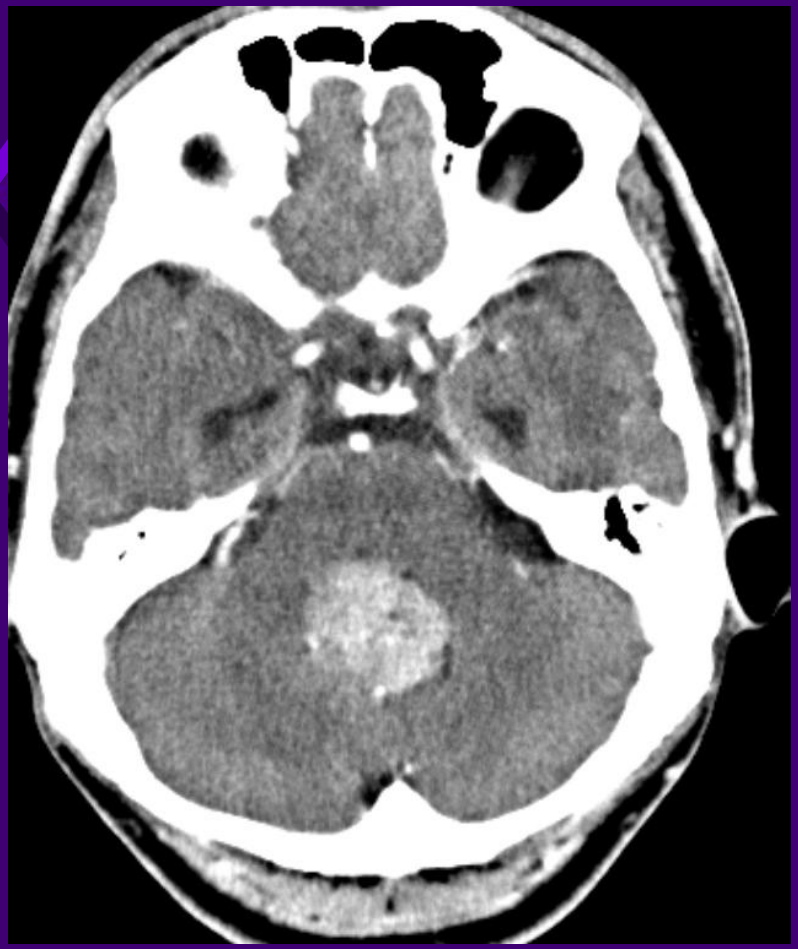


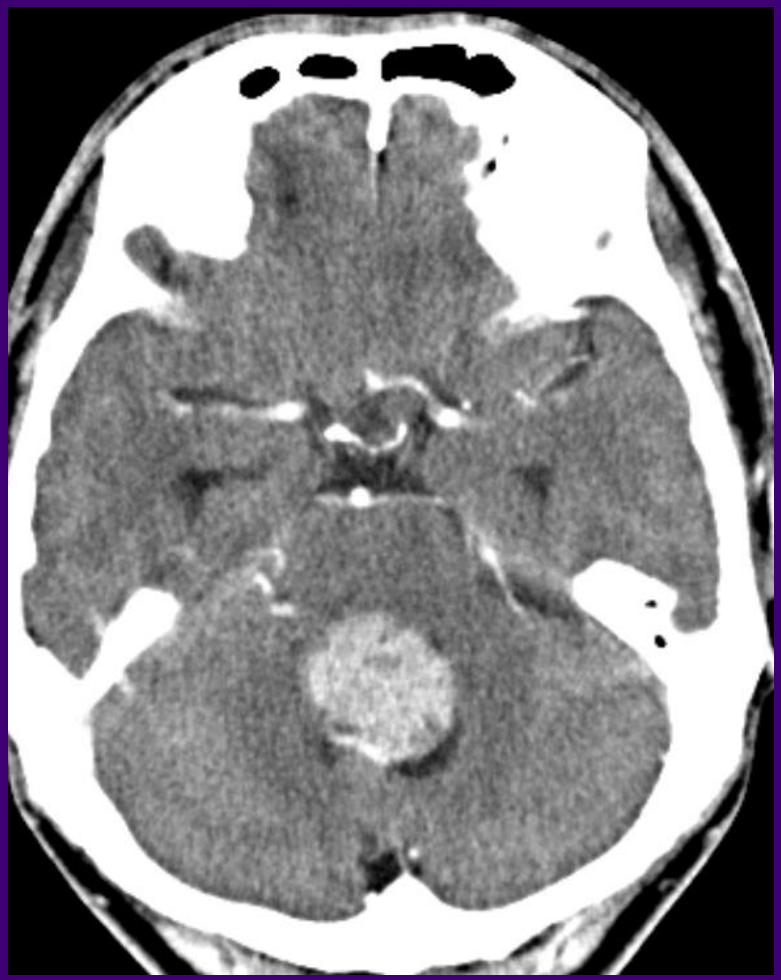


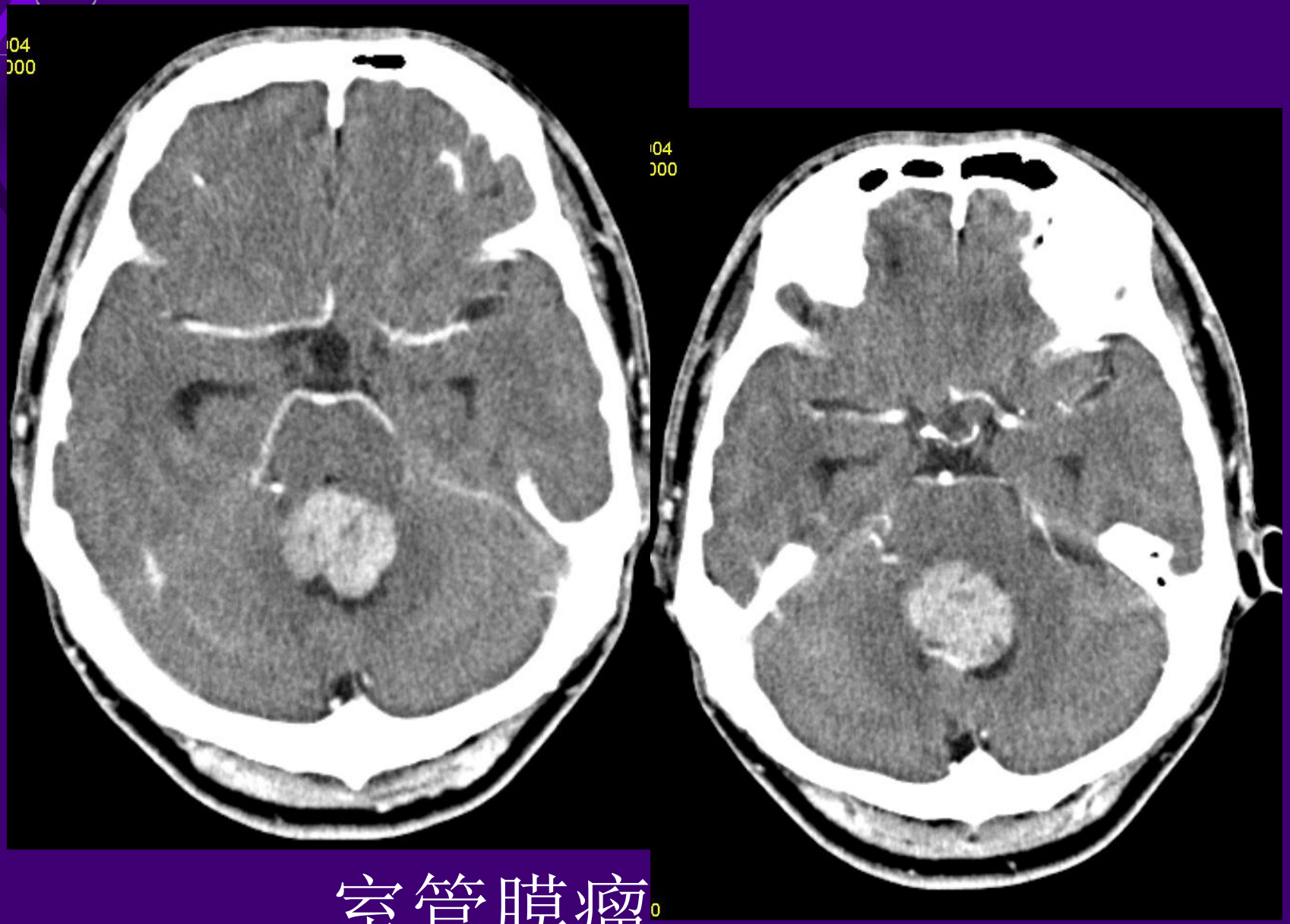
室管膜瘤ependymoma

是一类起源于室管膜细胞的肿瘤。占颅内肿瘤的5.19%,占胶质瘤的12.2%。可发生于脑室系统的任何部位，以第四脑室最多见占45.36%。

主要见于小儿和青少年，6～15岁。

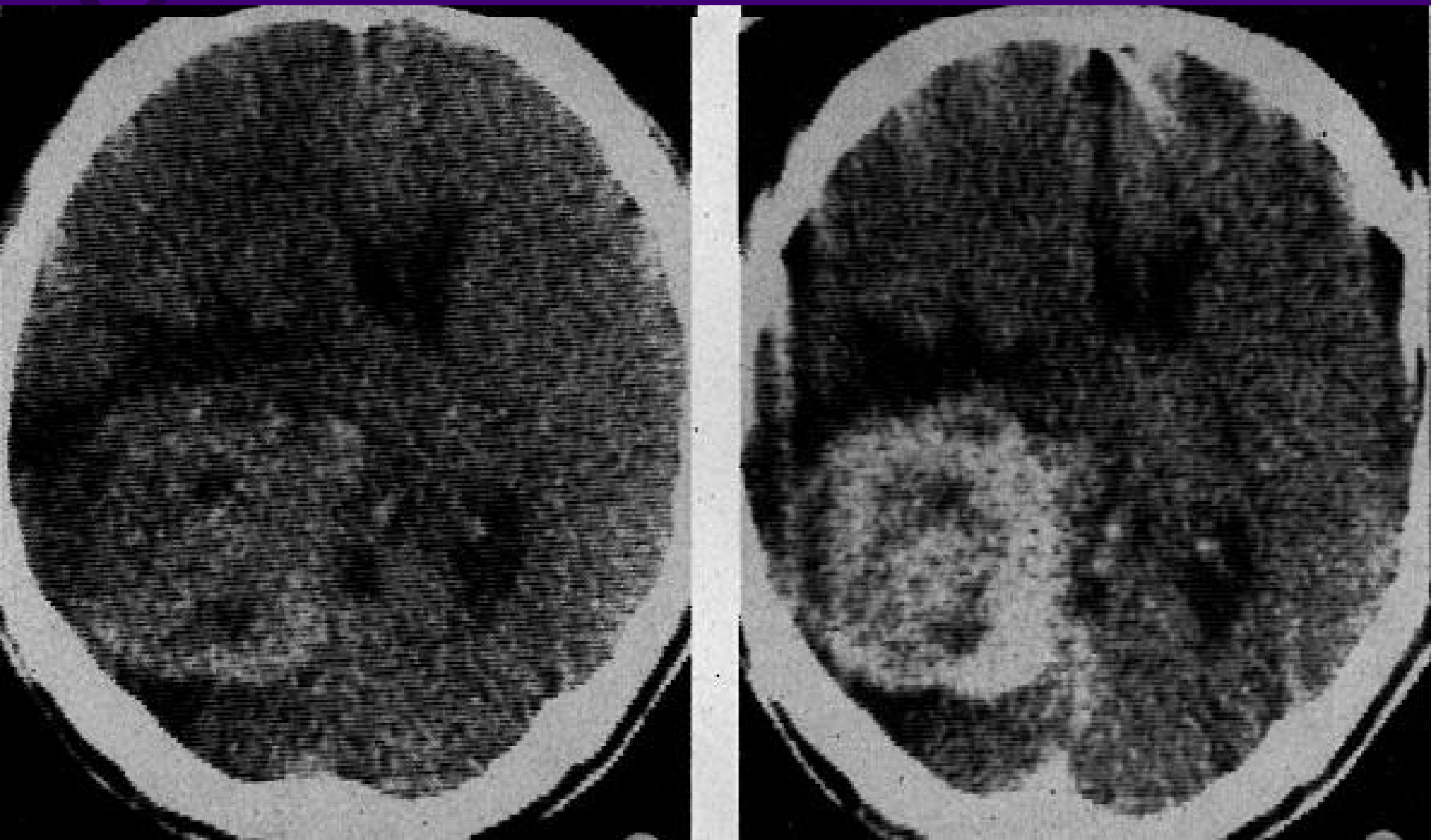


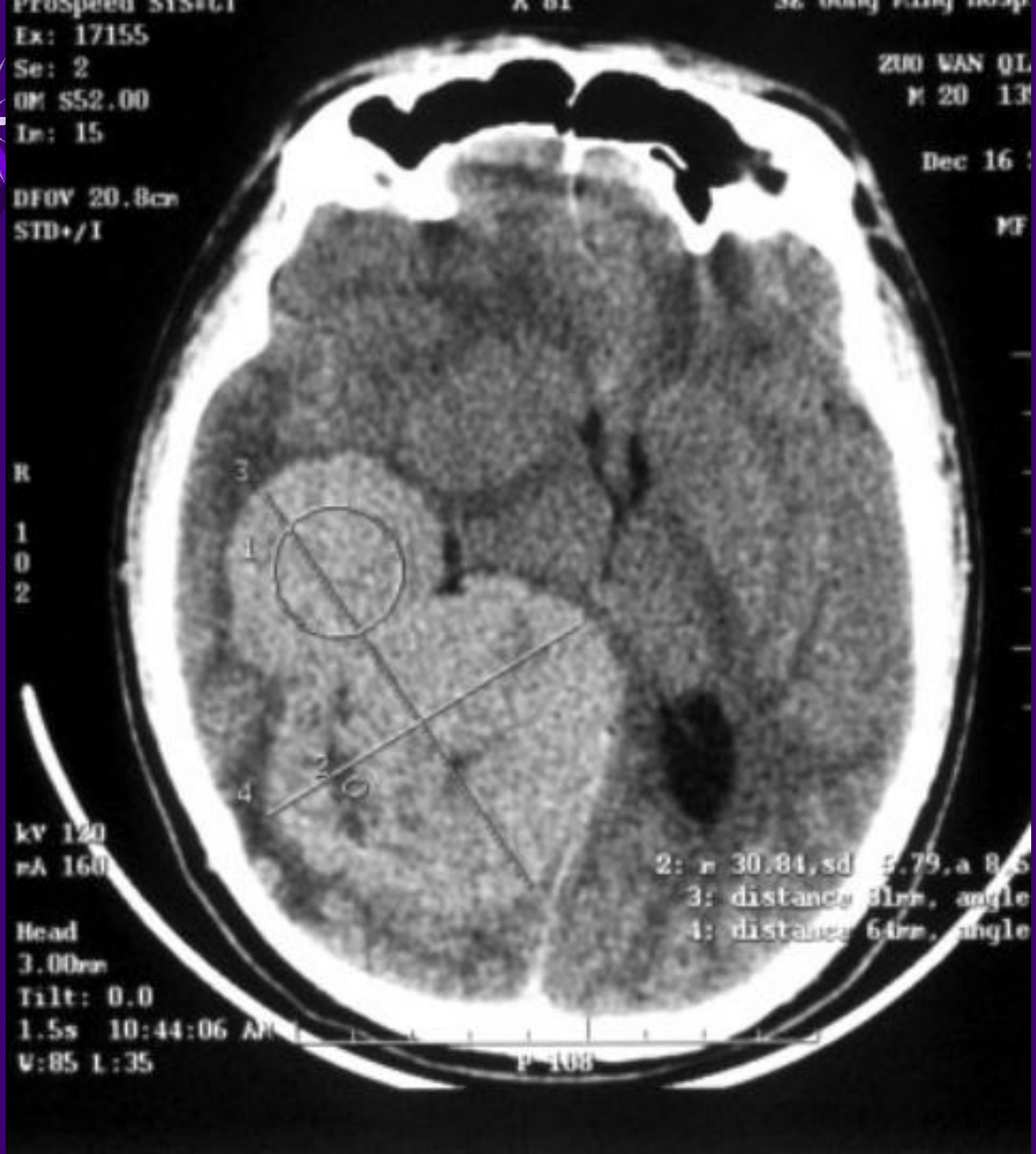




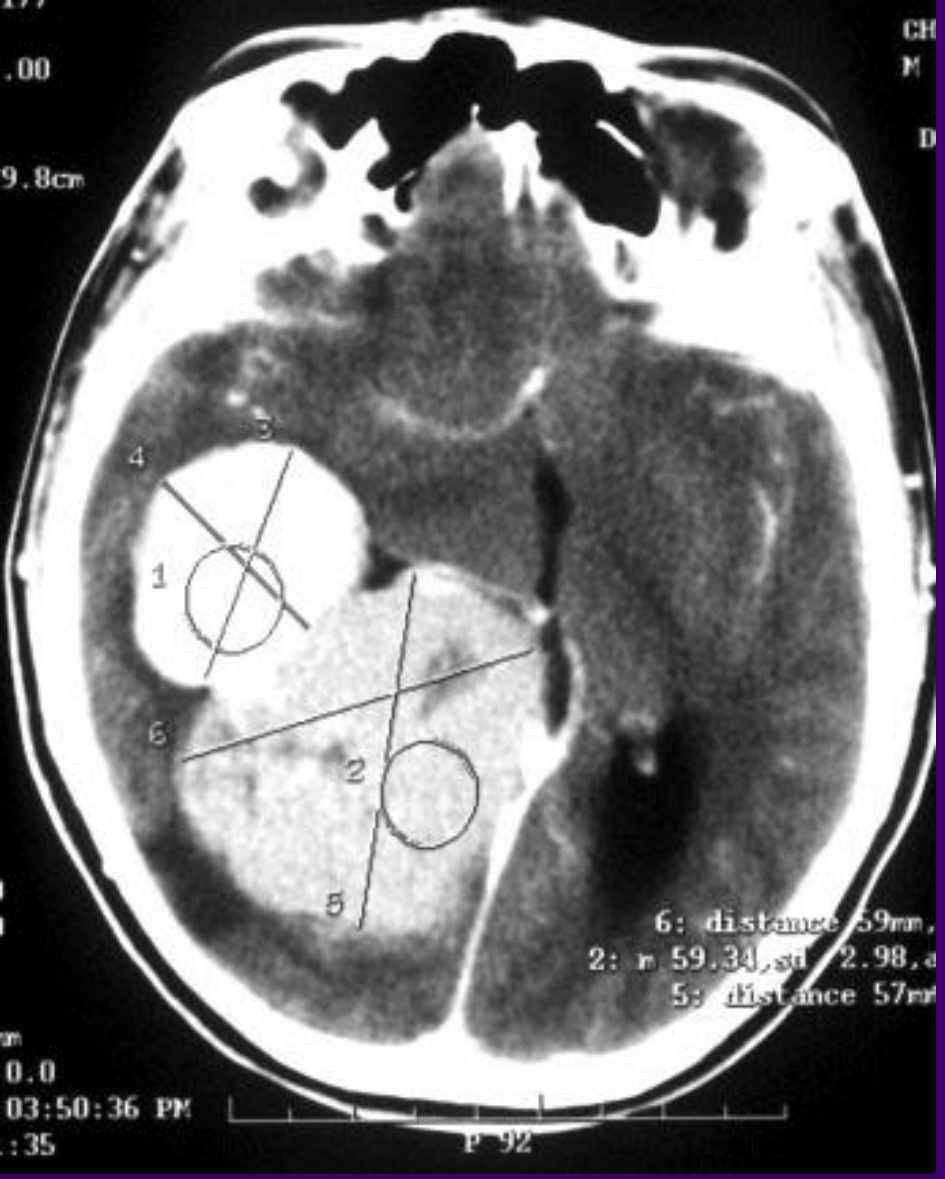
室管膜瘤

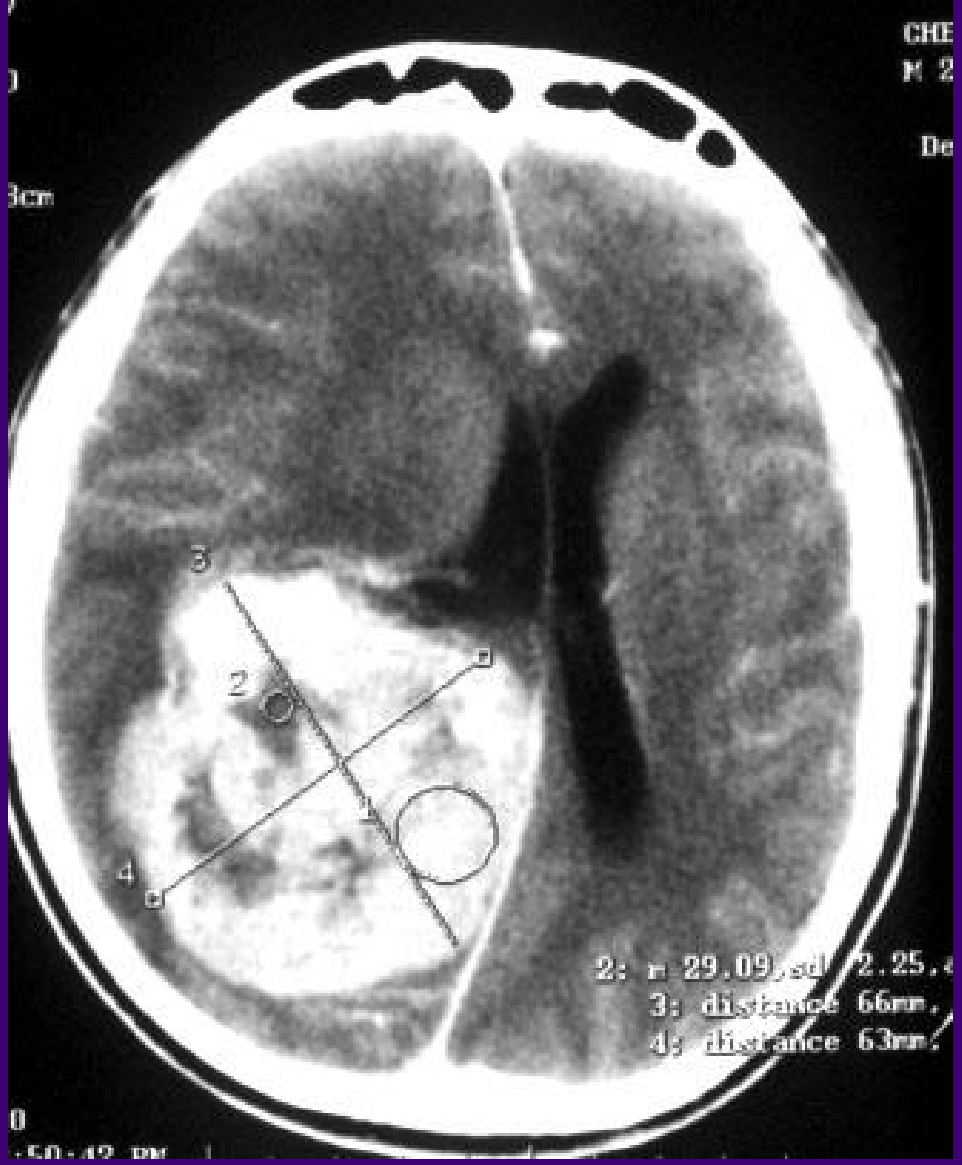
室管膜瘤—CT表现




Ex: 17155
Se: 2
OM $52.00
In: 15
DFOV 20.8cm
STD+/I
R
1
0
2
3
1
4
2
kV 120
mA 160
Head
3.00mm
Tilt: 0.0
1.5s 10:44:06
W:85 L:35

室管膜瘤平扫

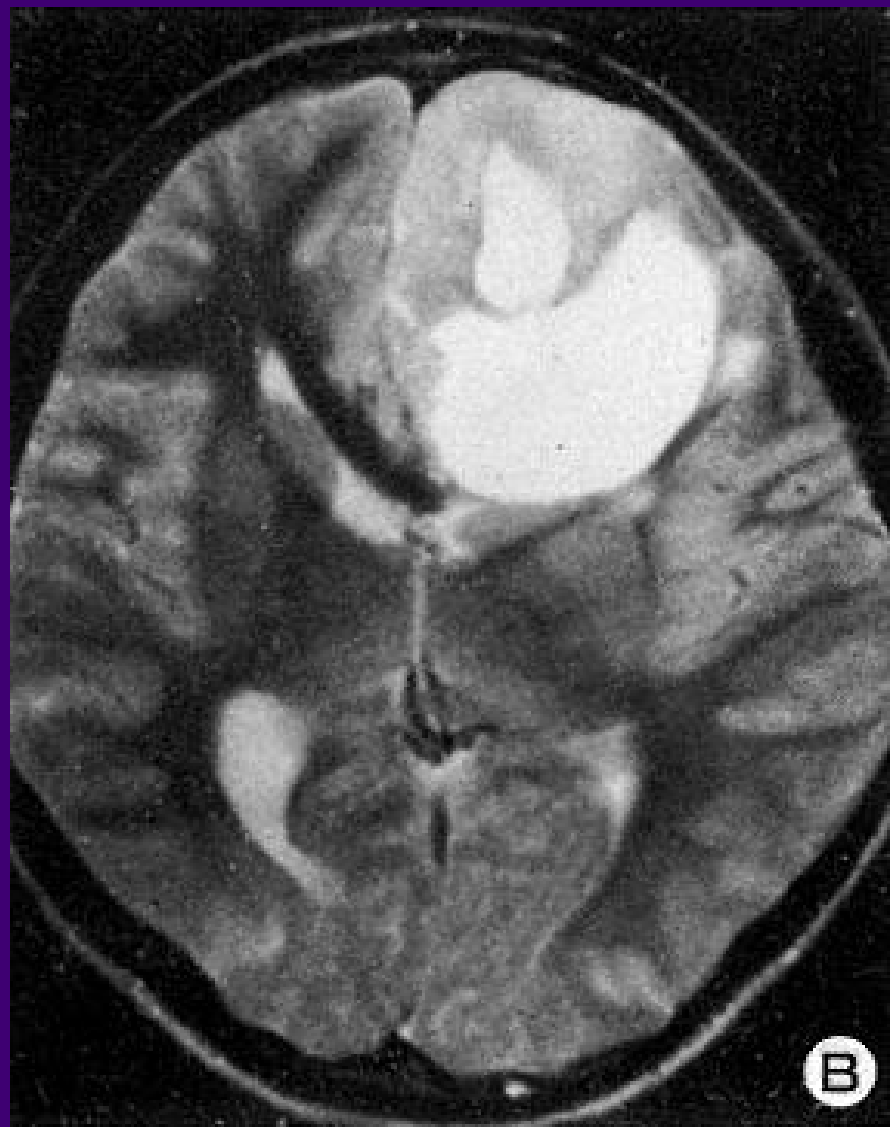

3
4
1
6
2
5
6: distance 59mm,
5: distance 57mm
03:50:36 PM
P 92

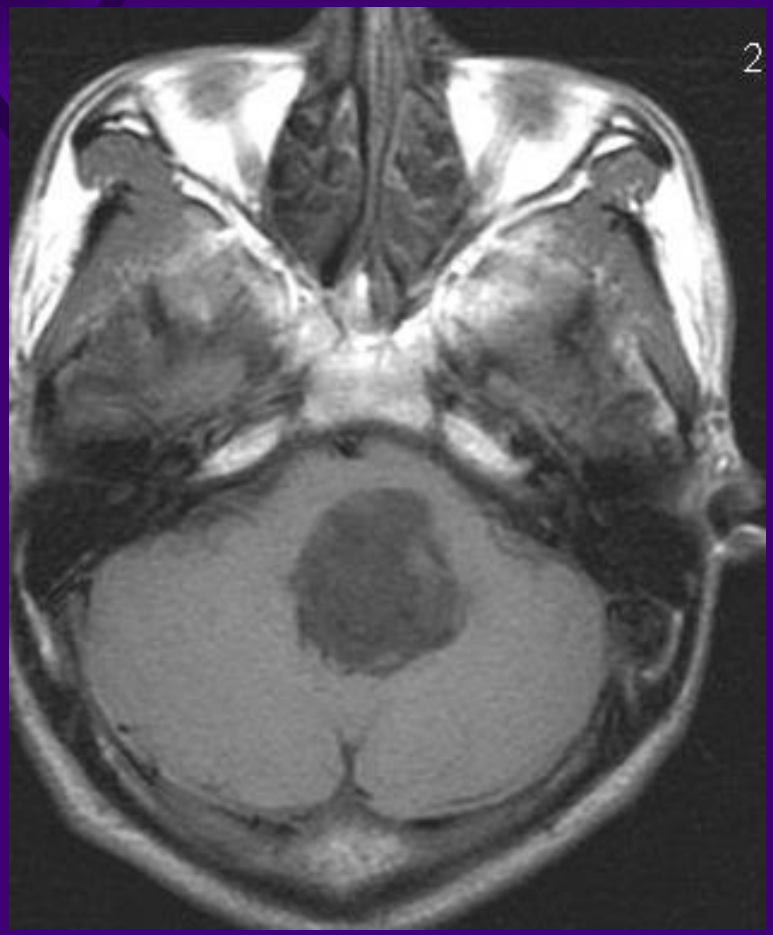

3
2
4
1
2: m 29.09,sd 2.25,
3: distance 66mm,
4: distance 63mm,

室管膜瘤增强表现

室管膜瘤—MRI表现

脑实质内
室管膜瘤
—MRI表现

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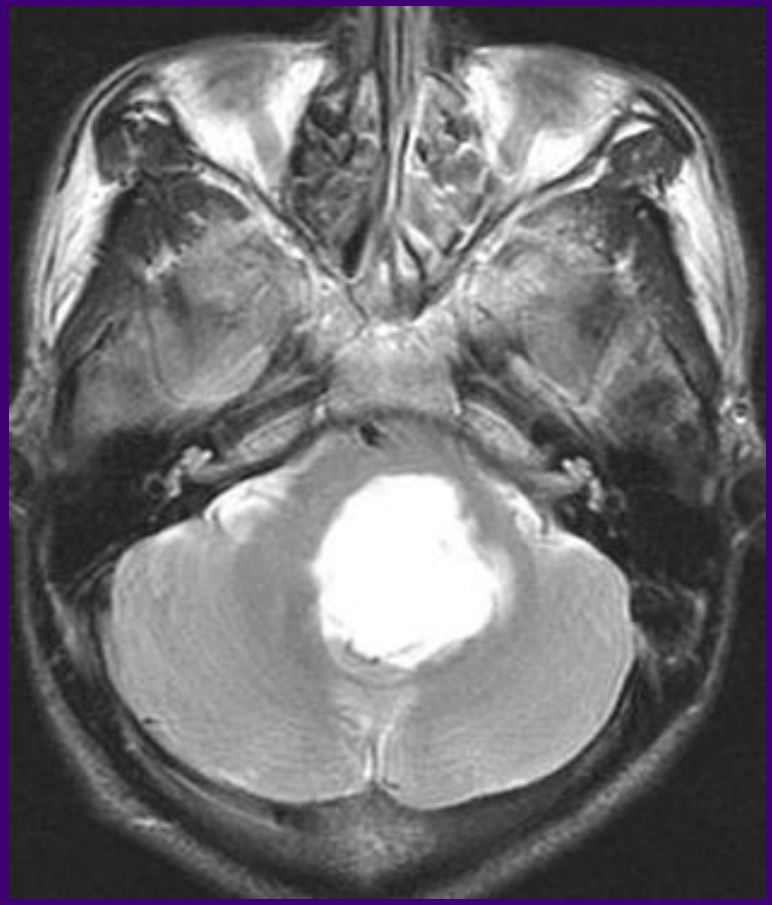
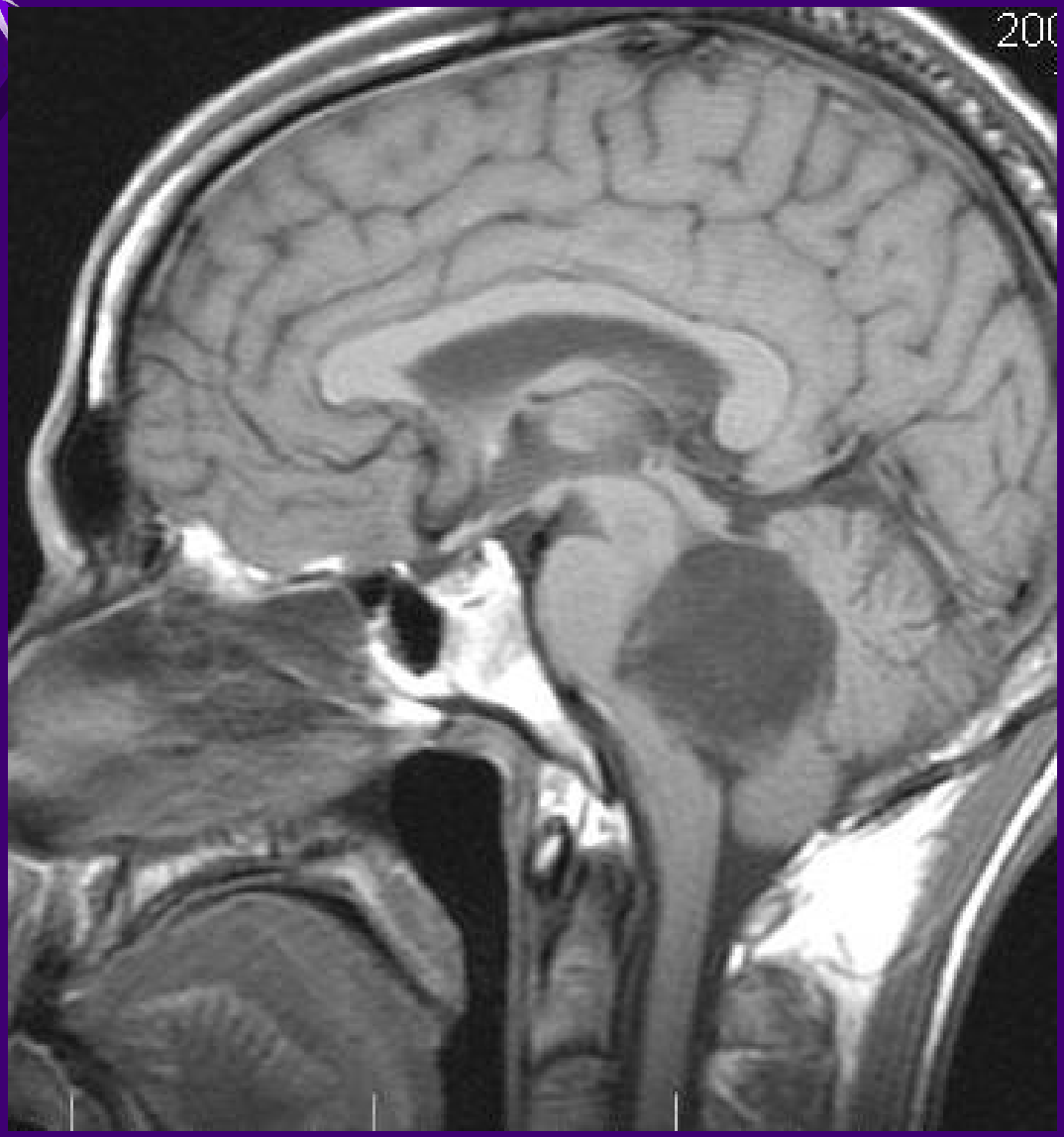




脑膜瘤meningioma

⑴、临床表现轻微，神经系统受损的表现不定，多见于女性；

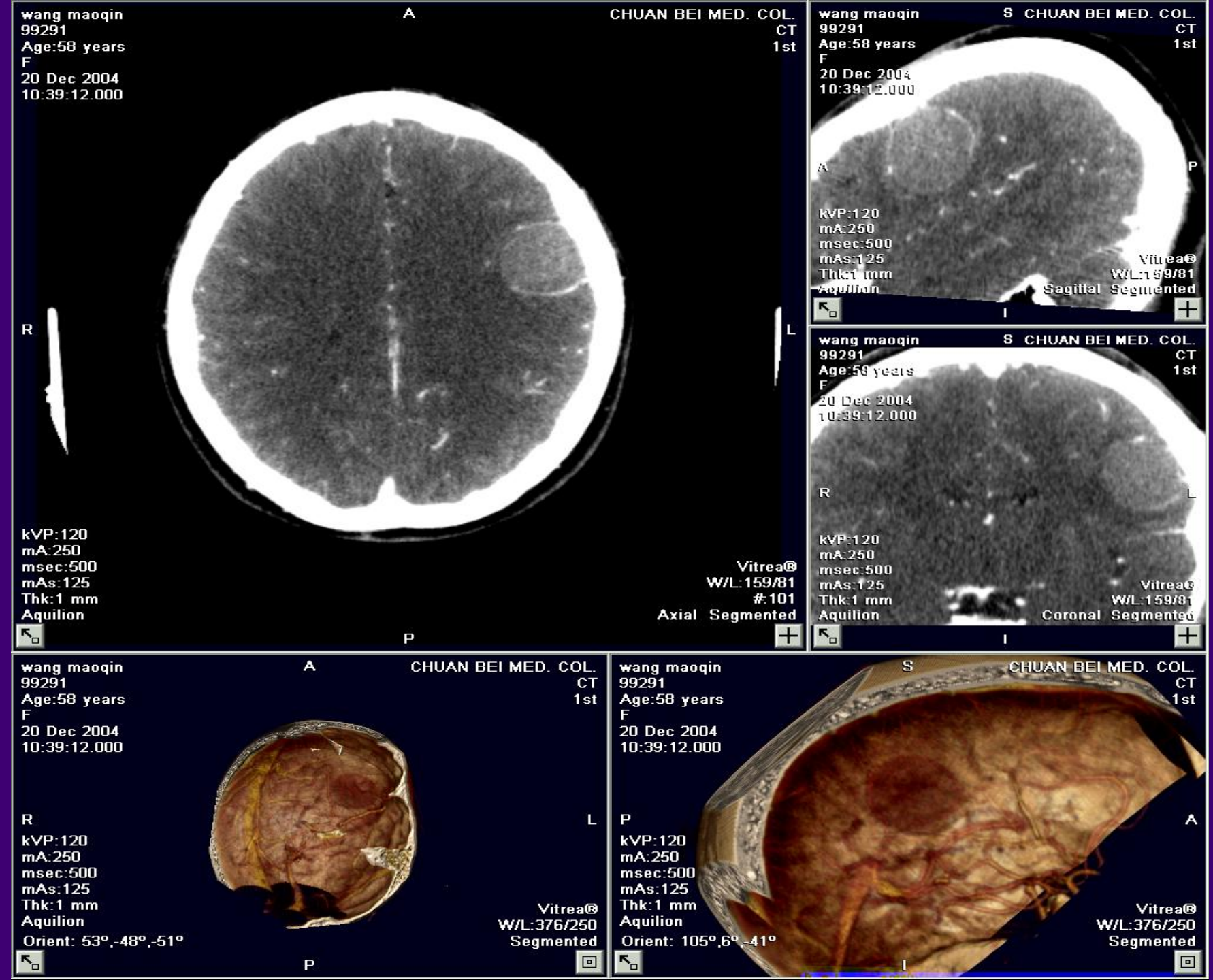
⑵、CT表现为平扫等密度或稍高密度团块影，边缘清楚，密度均匀为主，增强后病灶明显均匀性强化；

⑶、脑外肿瘤的征象；

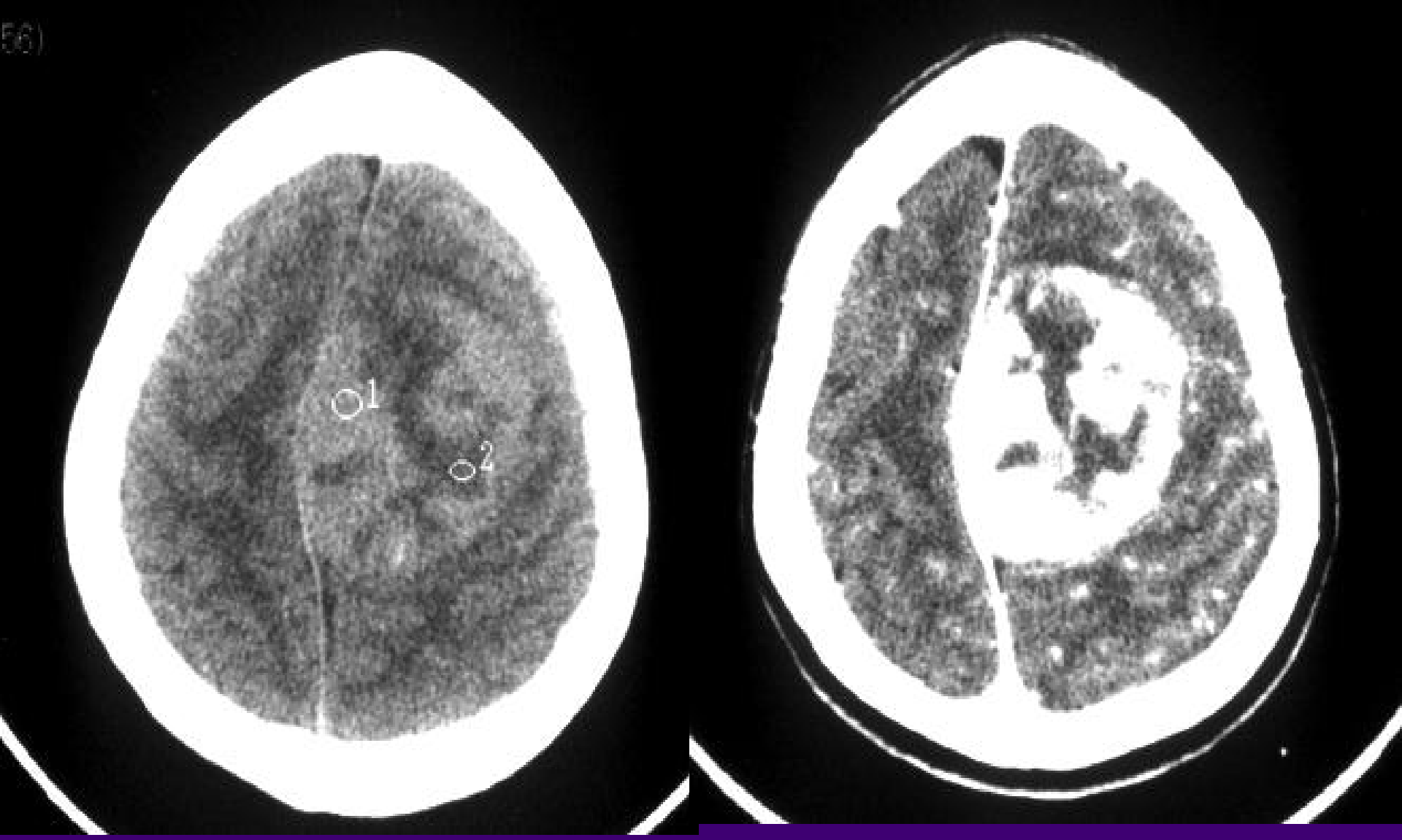
脑膜瘤

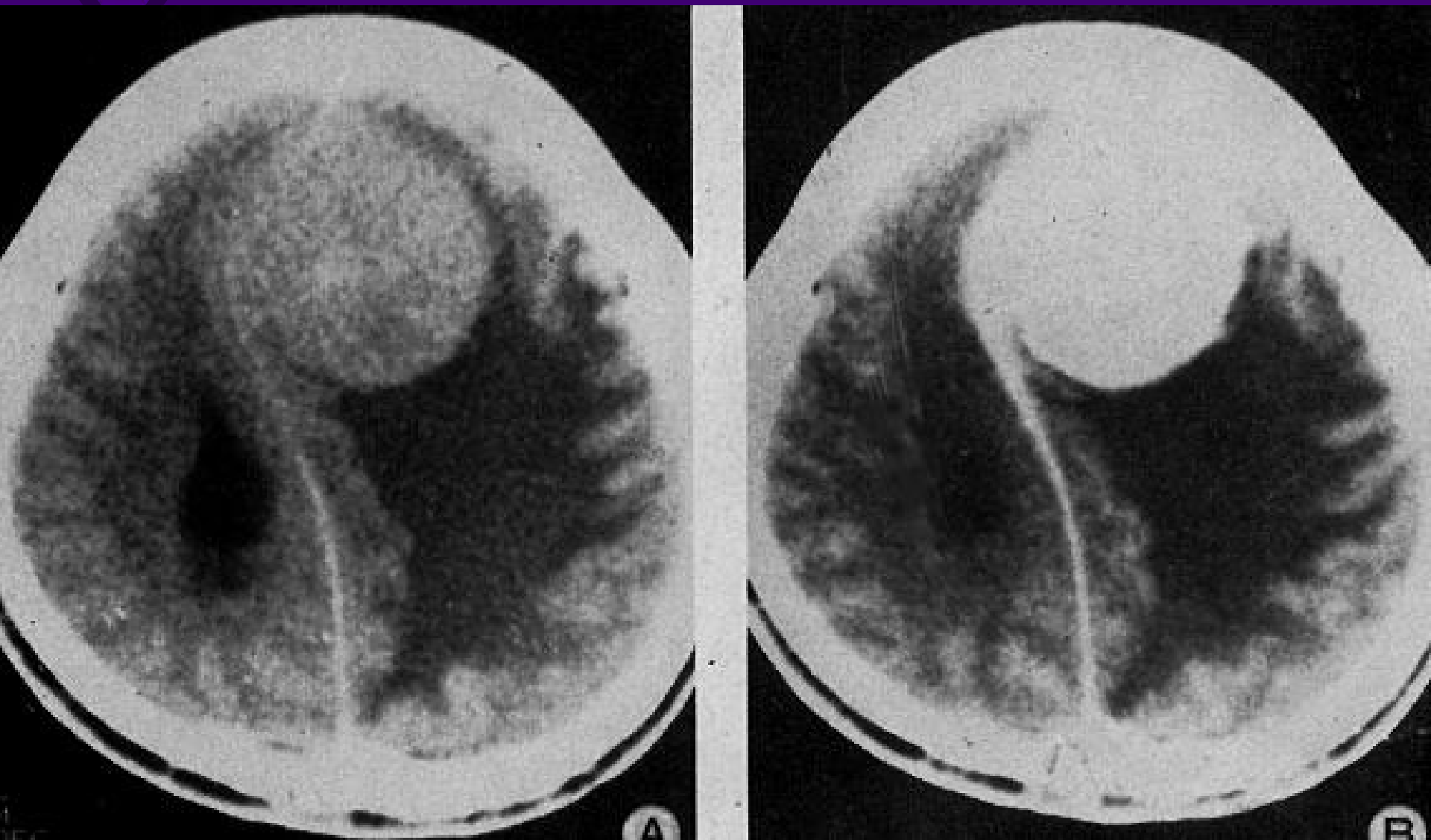
(4)、MRI上T1加权像肿瘤多为等或稍低信号，T2像为稍高或等信号，增强为明显强化；

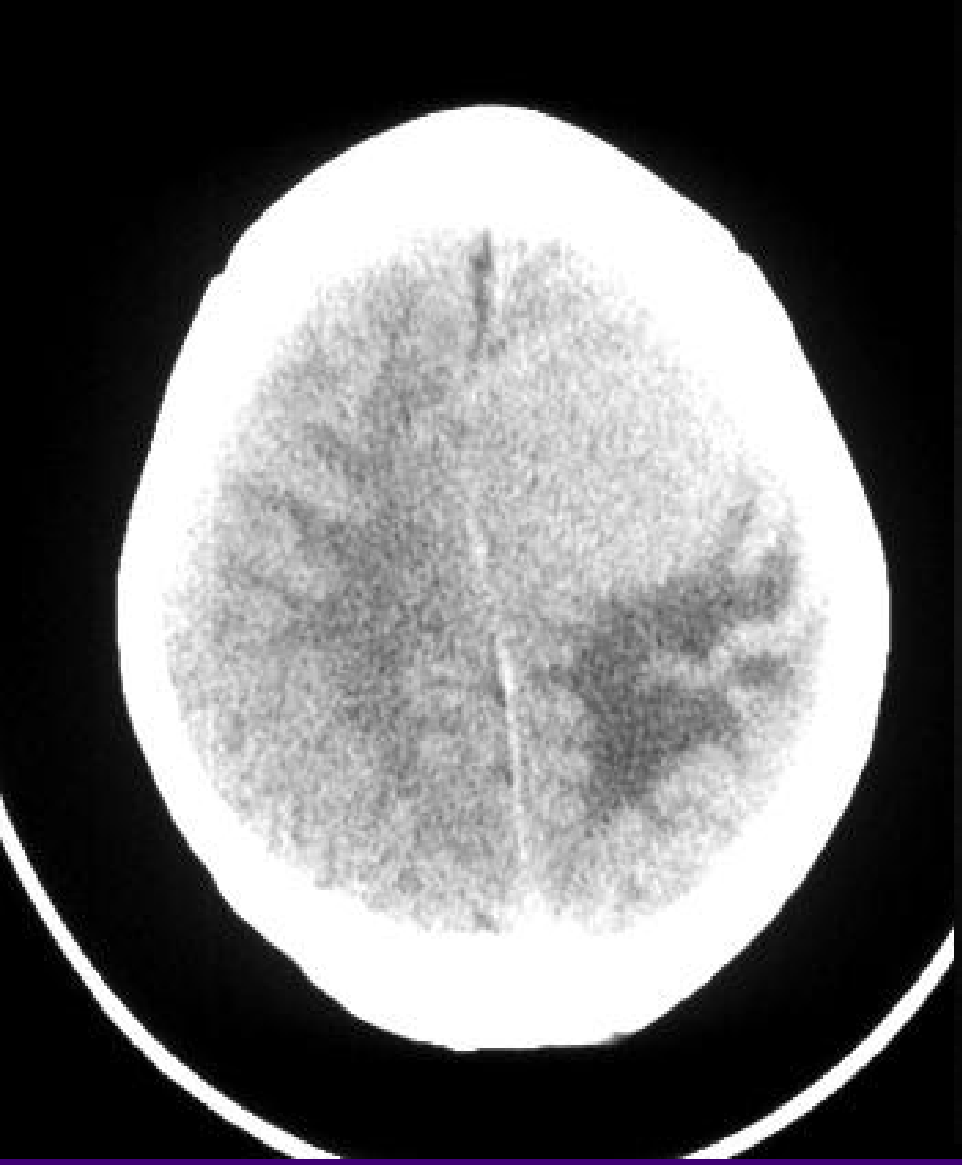
(5)、血管造影可见血管移位、肿瘤染色、脑膜瘤血循环晚于脑循环等特点，同时可显示肿瘤供血血管。

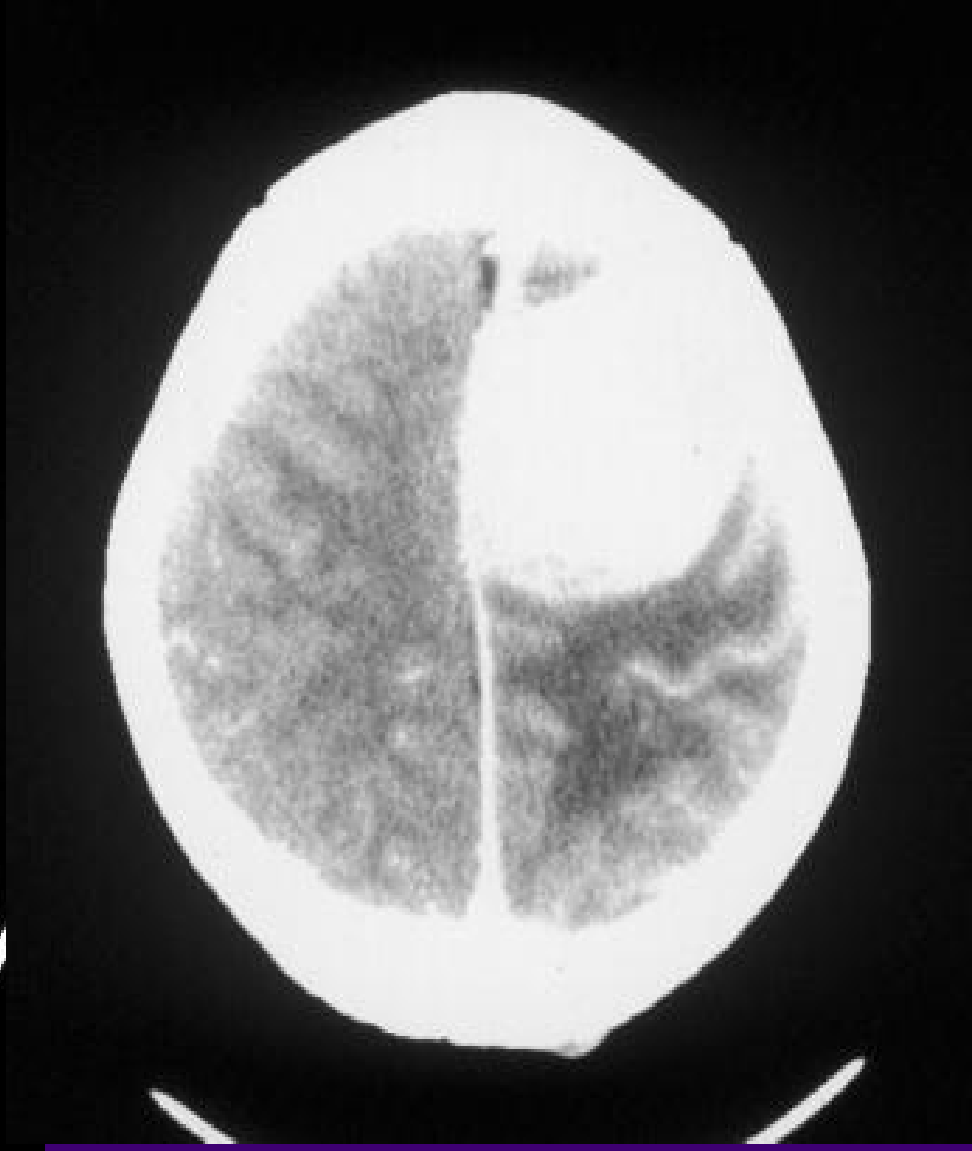

wang maoqin
99291
Age:58 years
F
20 Dec 2004
10:39:12.000
A
CHUAN BEI MED. COL.
CT
1st
R
L
P
kVP:120
mA:250
msec:500
mAs:125
Thk:1 mm
Aquilion
Vitrea®
W/L:159/81
#:101
Axial Segmented
S
Sagittal Segmented
Coronal Segmented
I
W/L:376/250
Segmented
Orient: 53°,-48°,-51°
Orient: 105°,6°,-41°

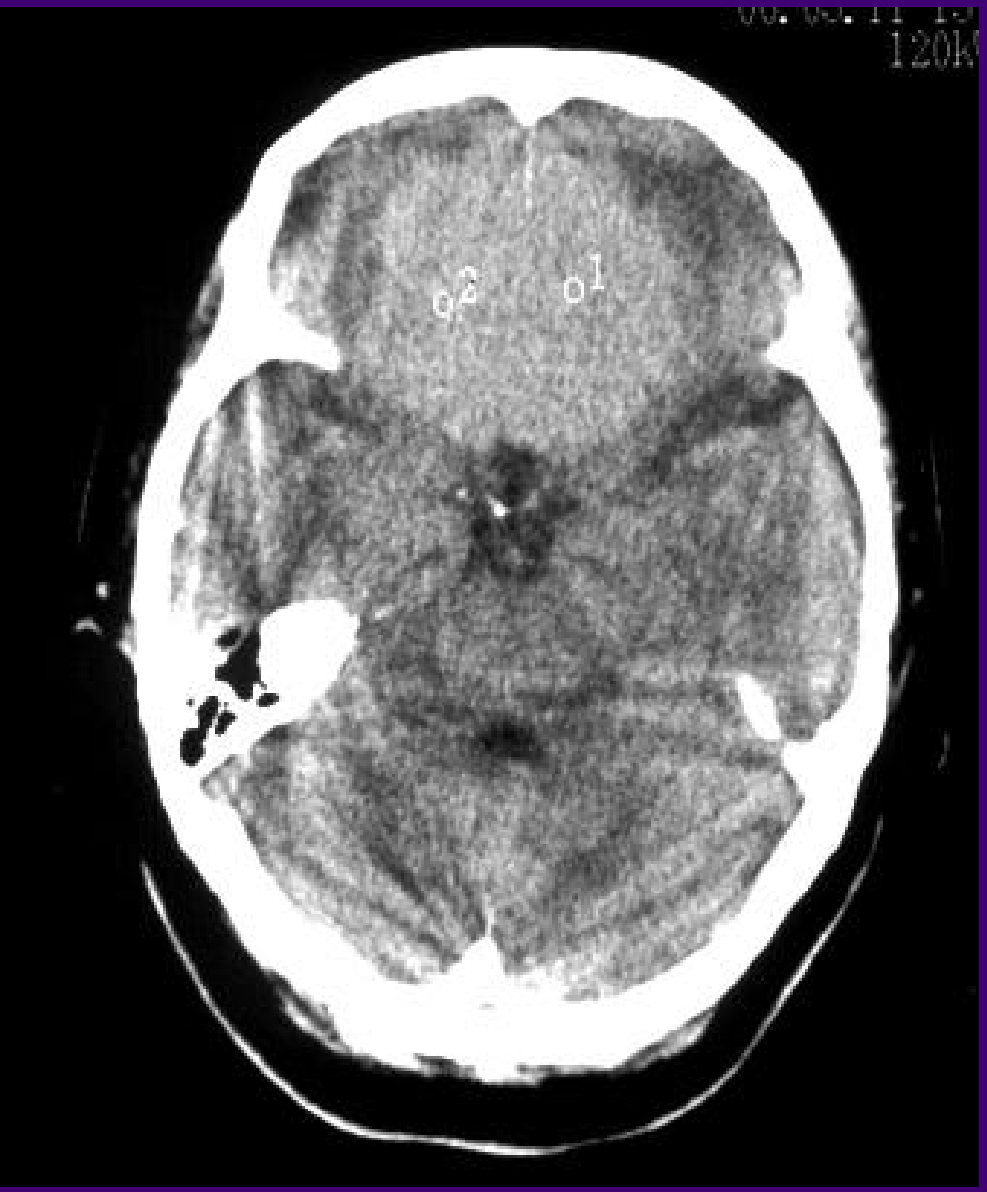
脑膜瘤

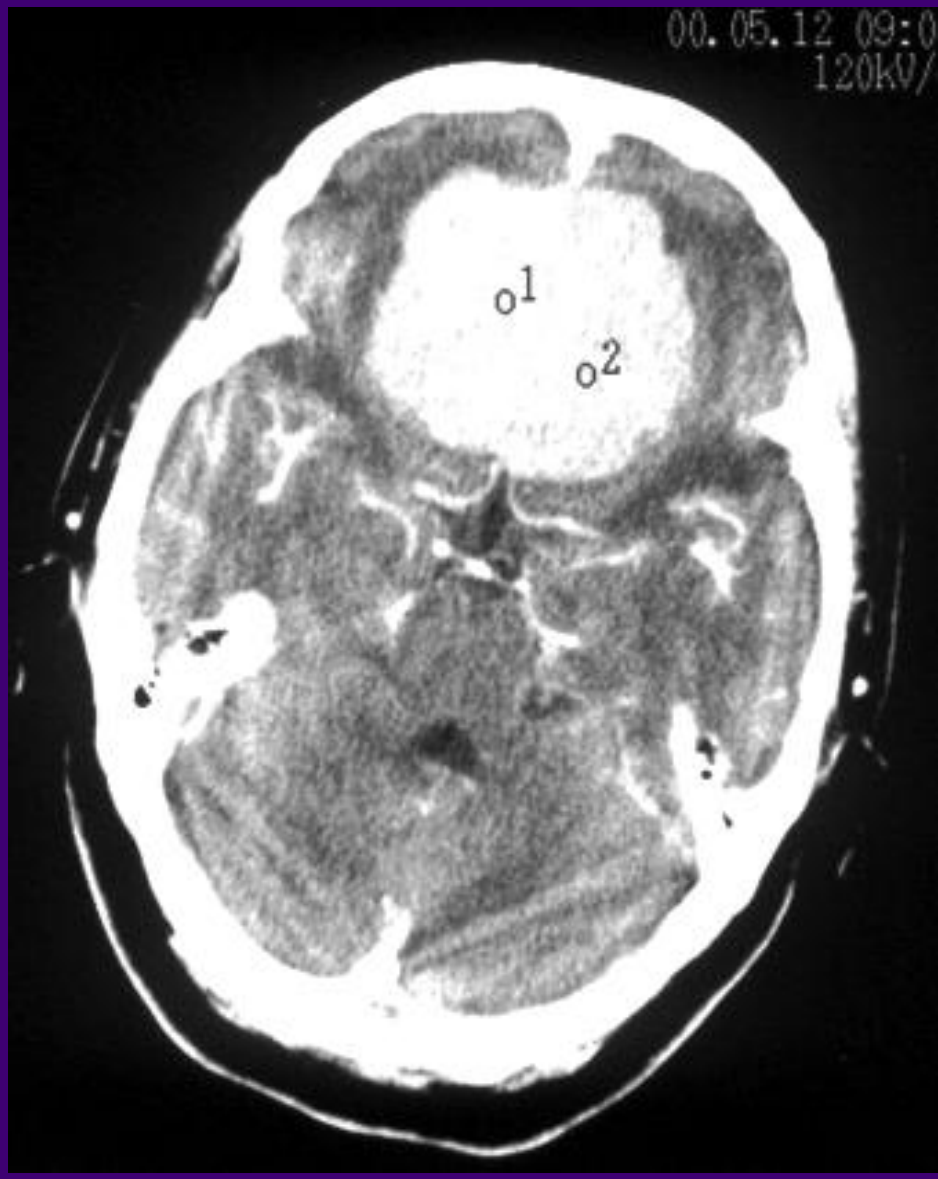

1
2

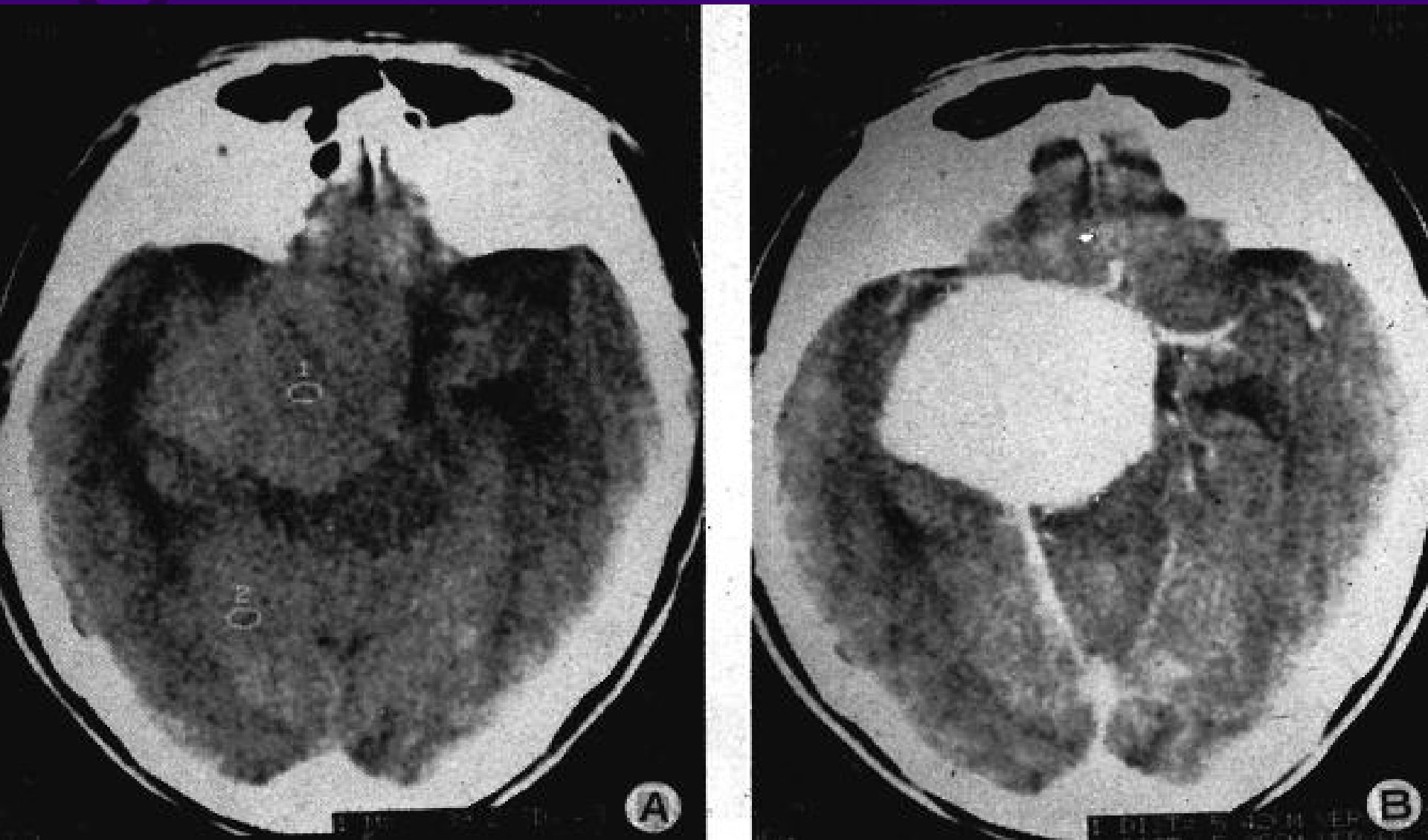

A
B

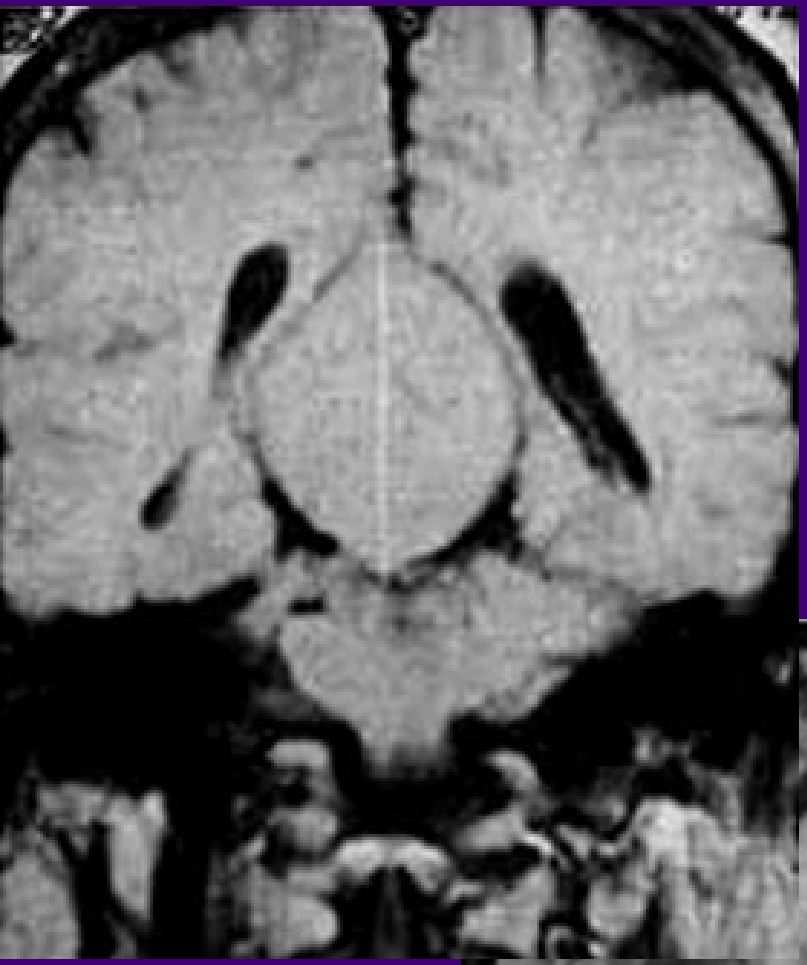


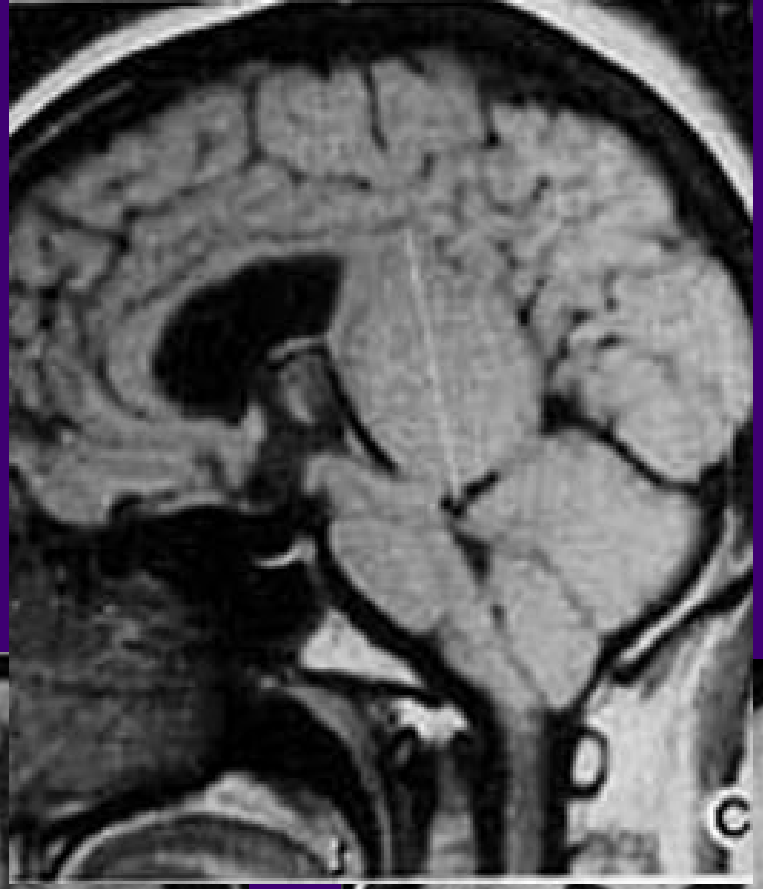



o2
o1


00.05.12 09:0
120kV/
o1
o2


A
B

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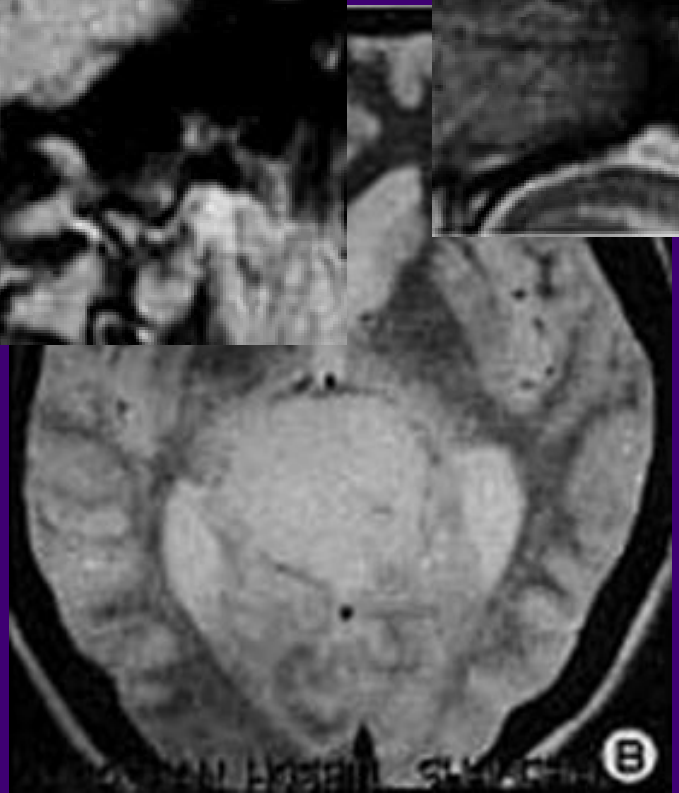
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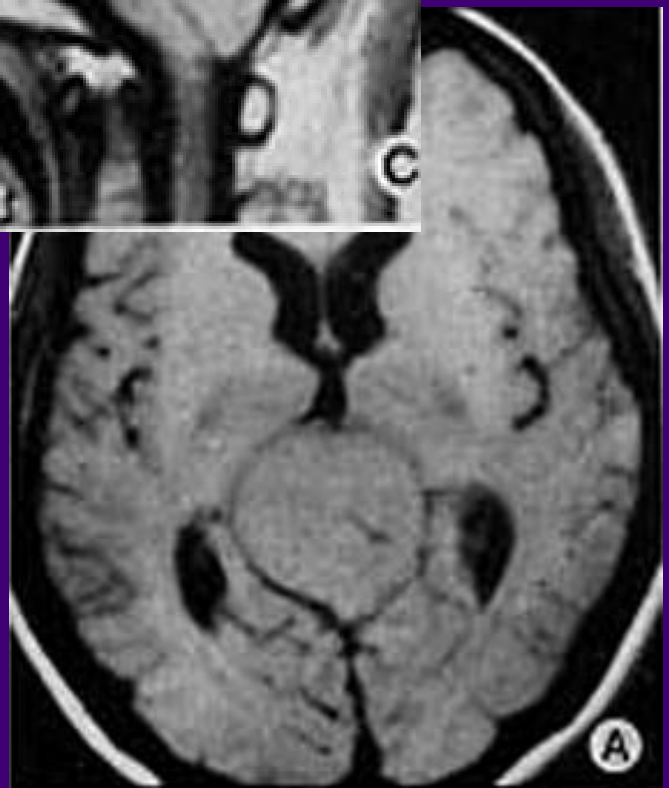
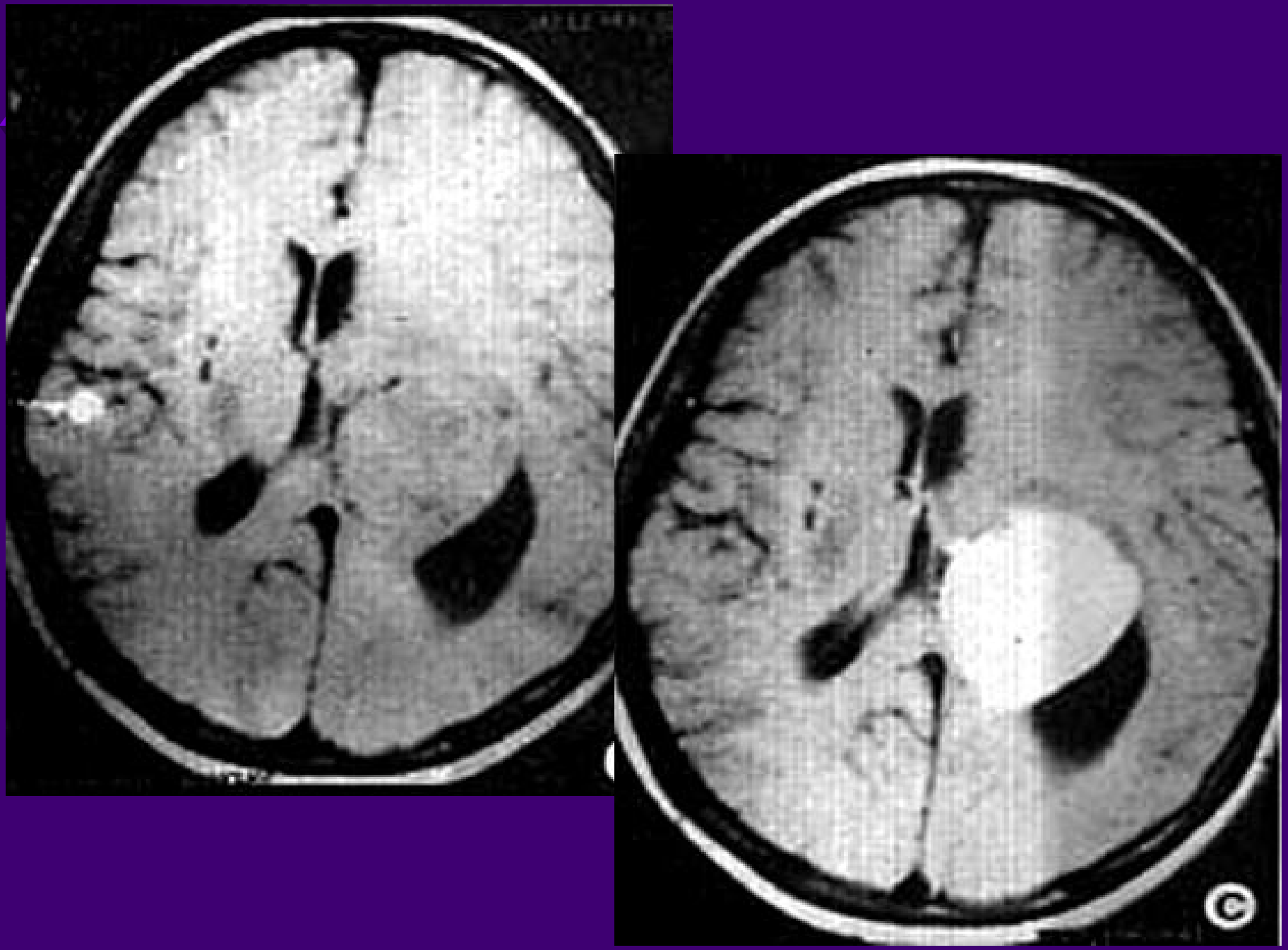
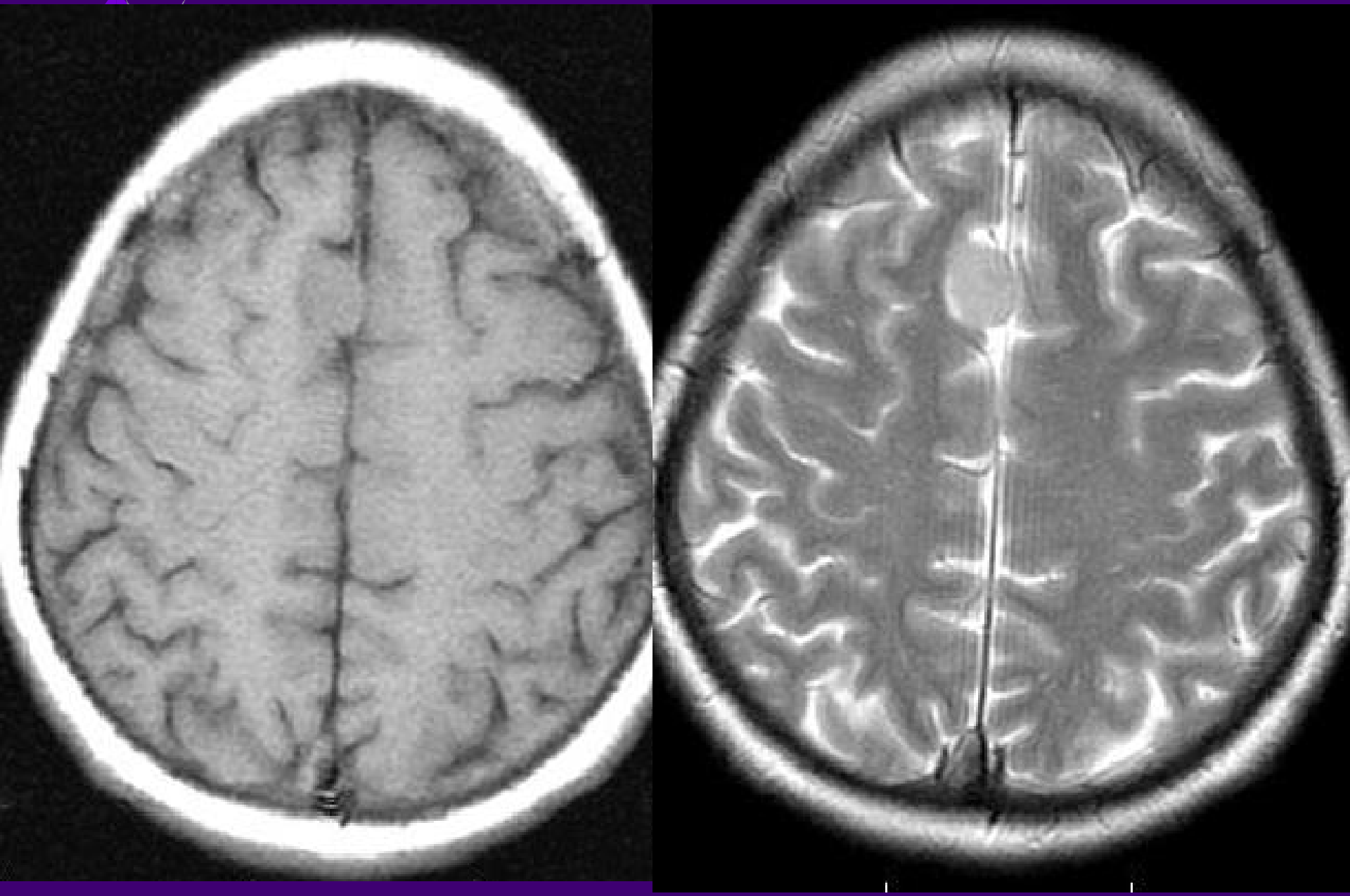
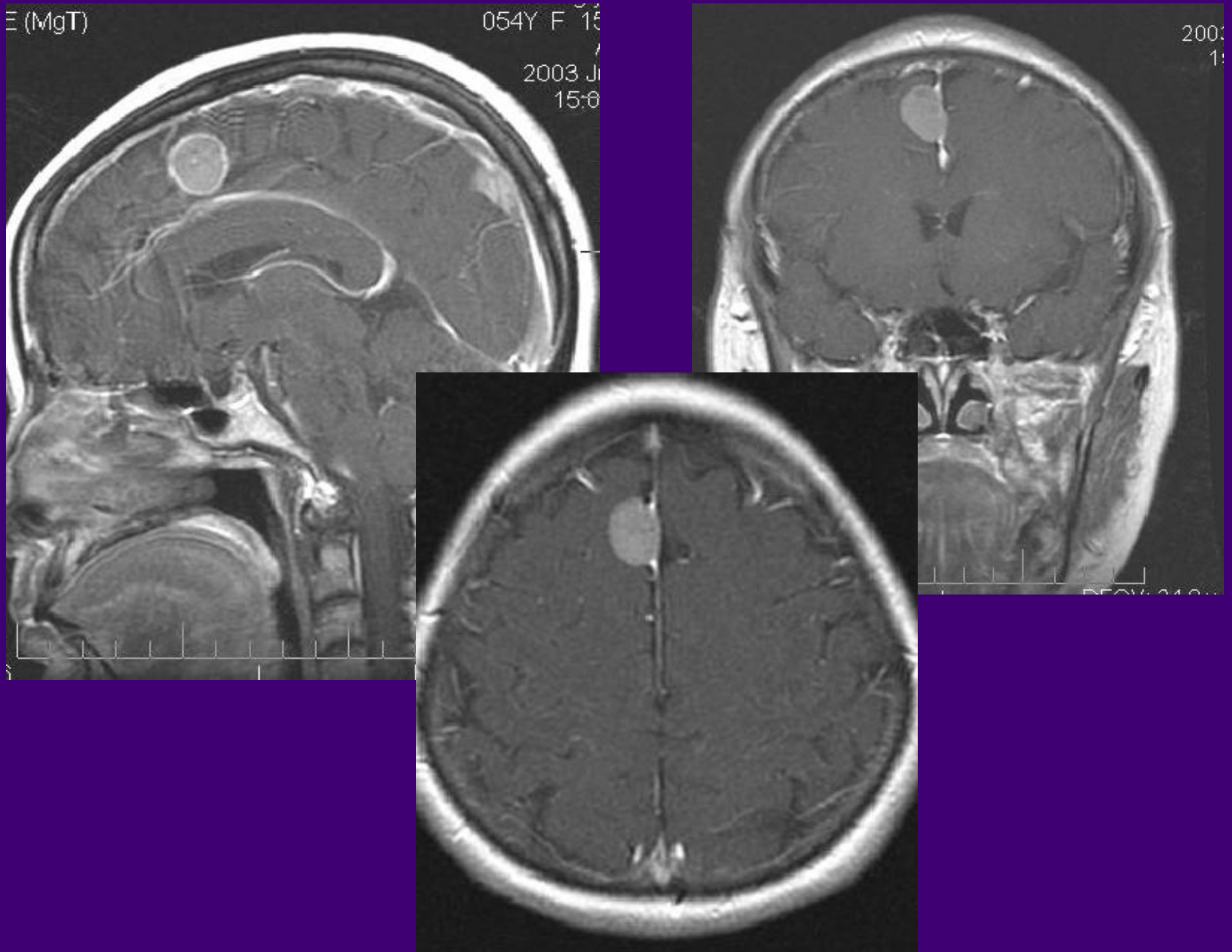
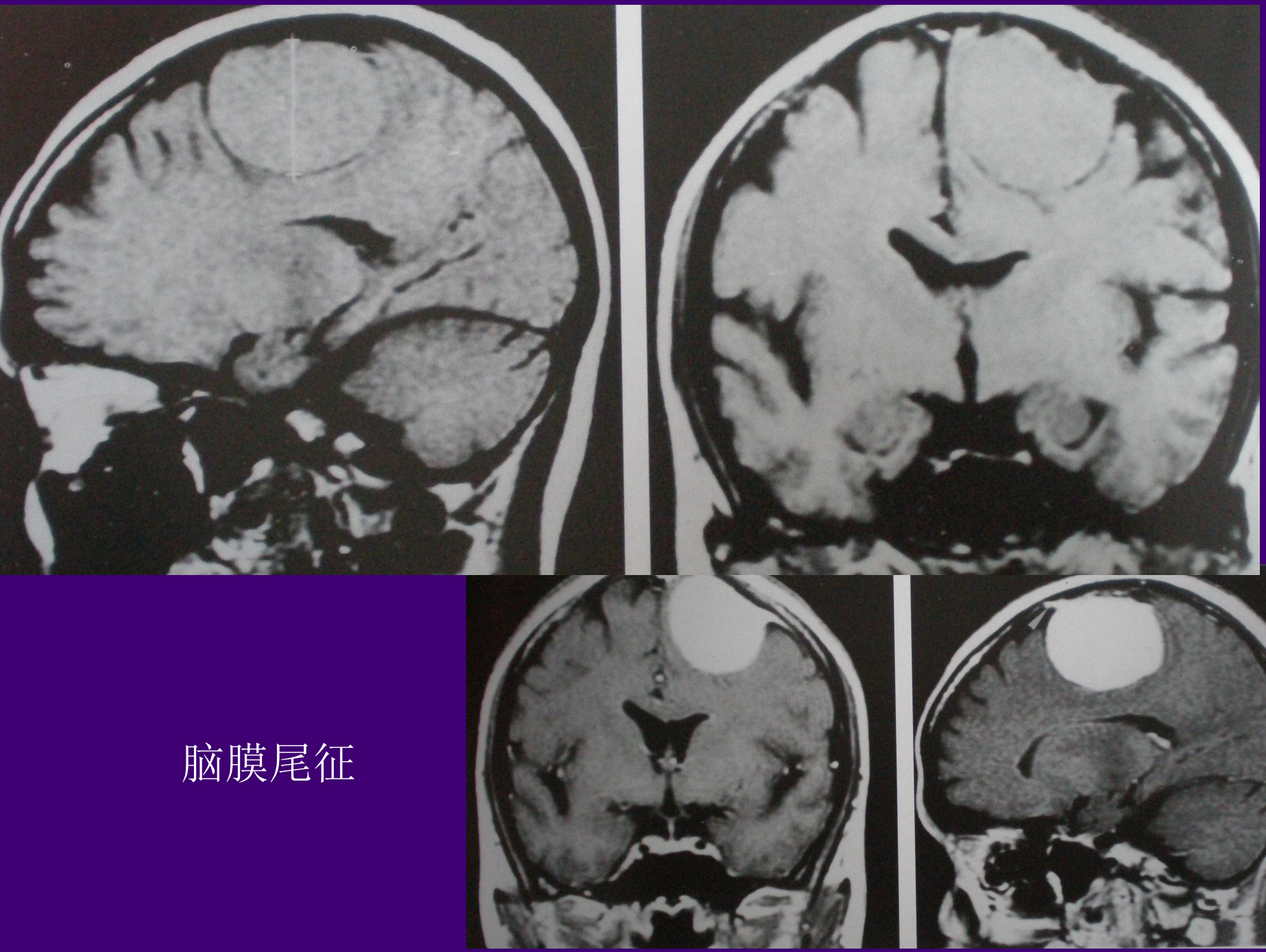

A

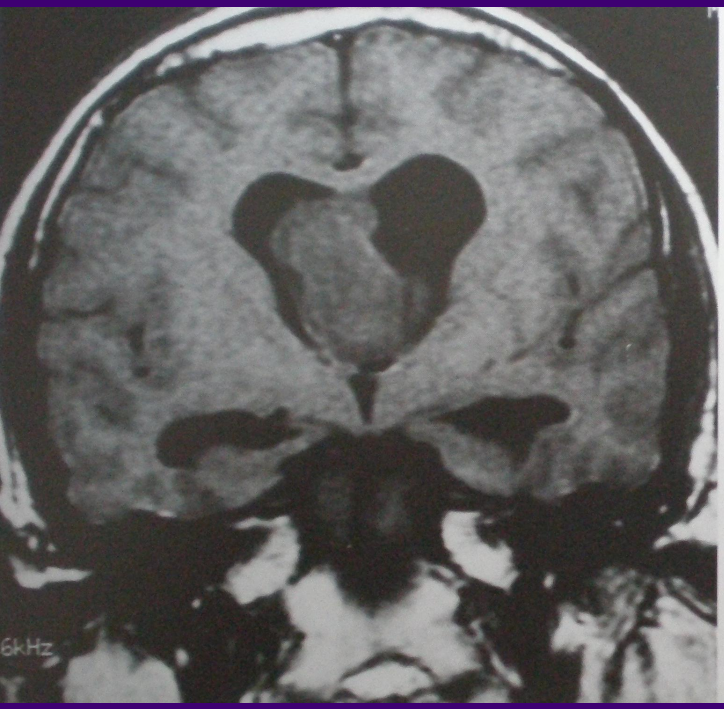


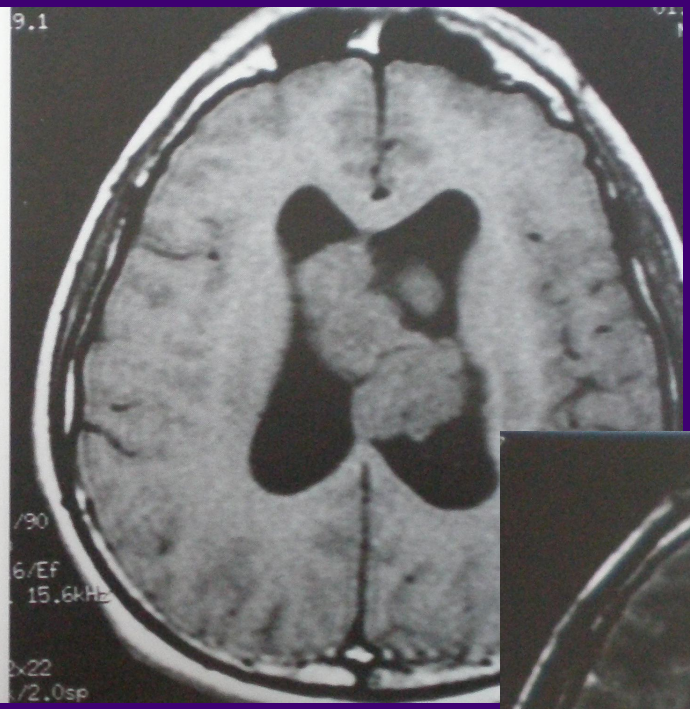


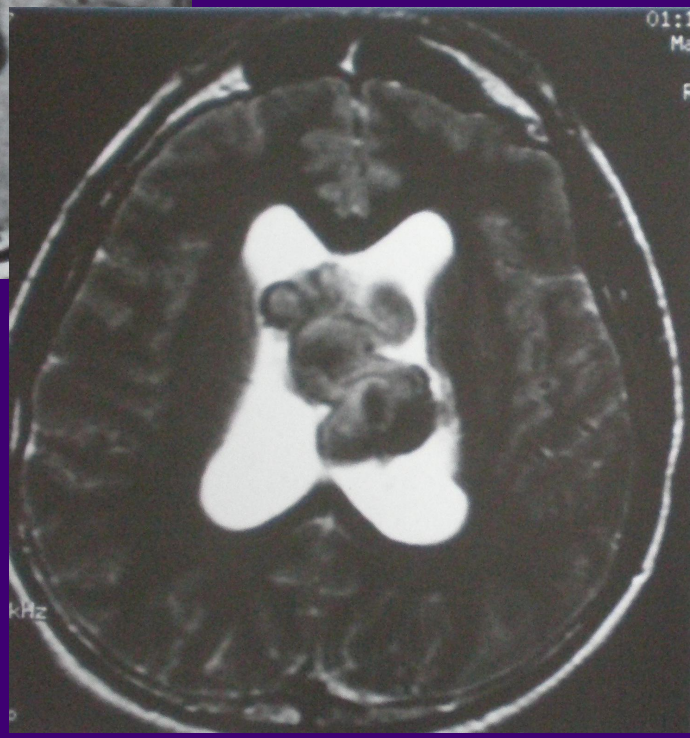

E (MgT)
054Y F
2003 J
15:6

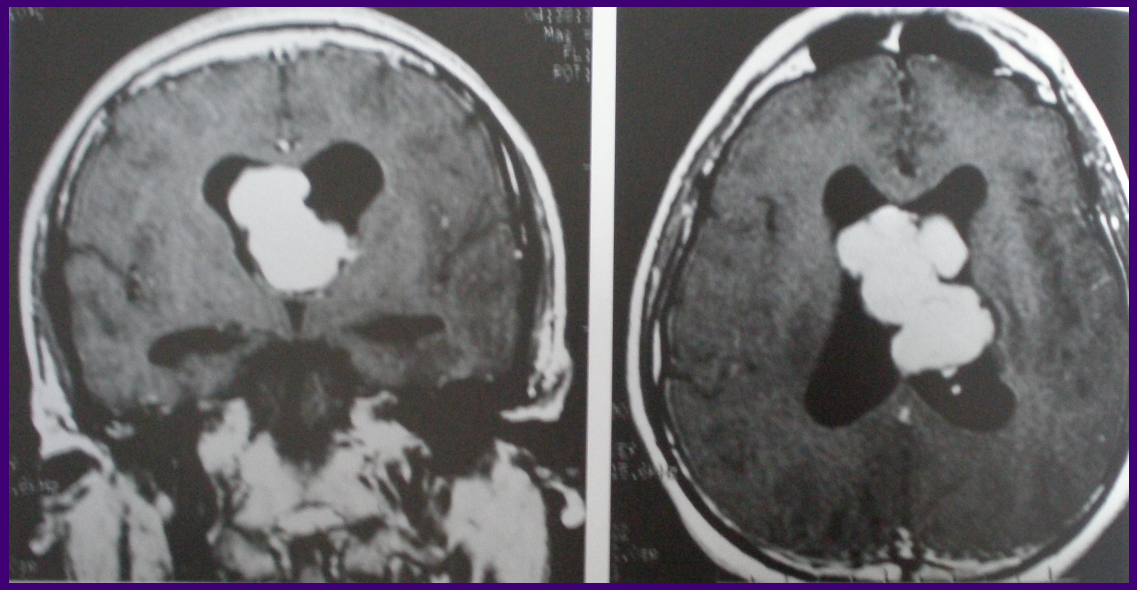


脑膜尾征





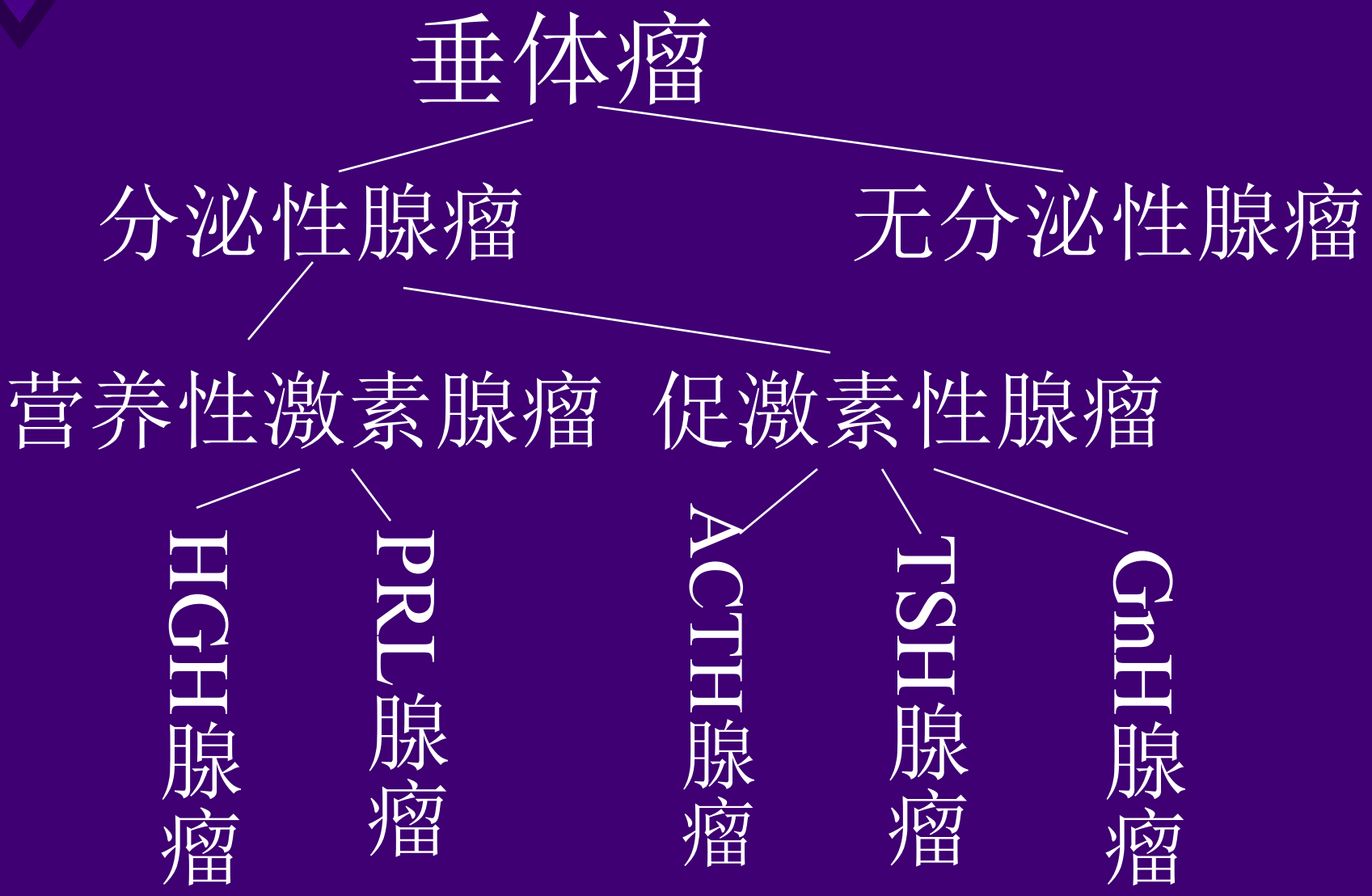




脑室内脑膜瘤

新武松打虎

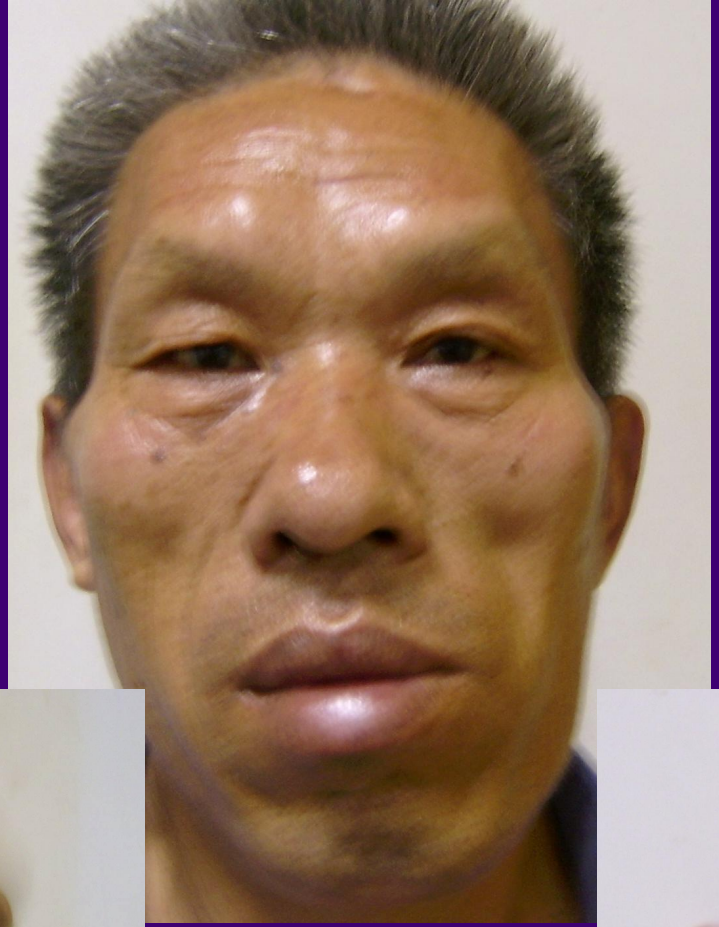
垂体瘤—病理

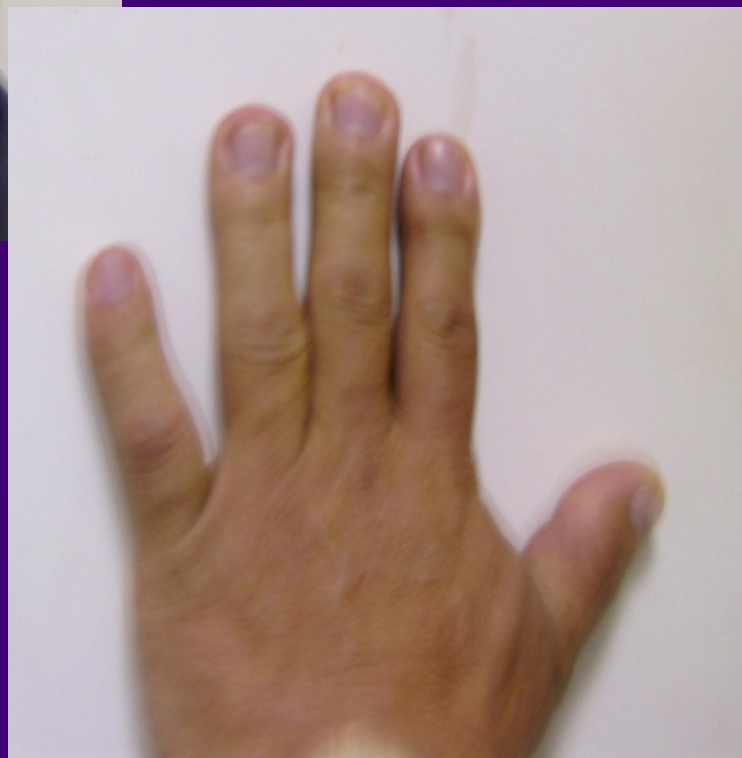

垂体瘤
分泌性腺瘤
无分泌性腺瘤
营养性激素腺瘤
促激素性腺瘤
HGH腺瘤
PRL腺瘤
ACTH腺瘤
TSH腺瘤
GnH腺瘤

垂体瘤—临床表现

垂体瘤最具特征的症状为内分泌症状，特别是内分泌亢进的症状。

泌乳闭经综合征—PRL腺瘤
肢端肥大症和巨人症—HGH腺瘤
Cushin氏综合征—ACTH腺瘤
常见症状：头痛、压迫视交叉，视力障碍。





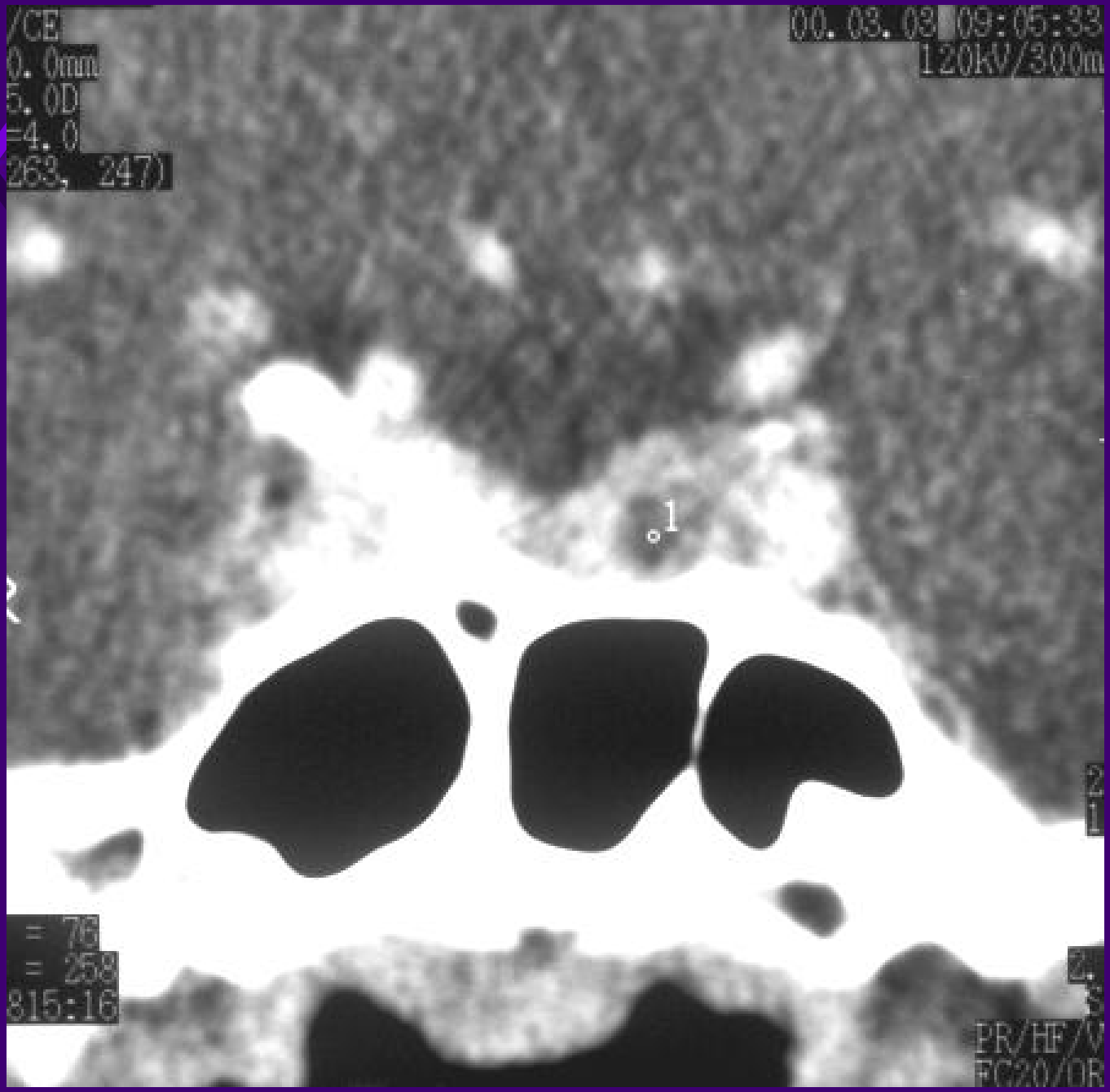
垂体瘤－CT表现

⑴、较特征的临床表现；

⑵、垂体微腺瘤CT增强早期表现为小结节状稍低密度灶，MRI上则呈稍长T1稍长T2强化不明显灶；

⑶、大腺瘤表现为鞍区团块影，临近结构受压变形；

⑷、X线片可见垂体窝扩大，骨质吸收等改变。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5.0D
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120kV/300m
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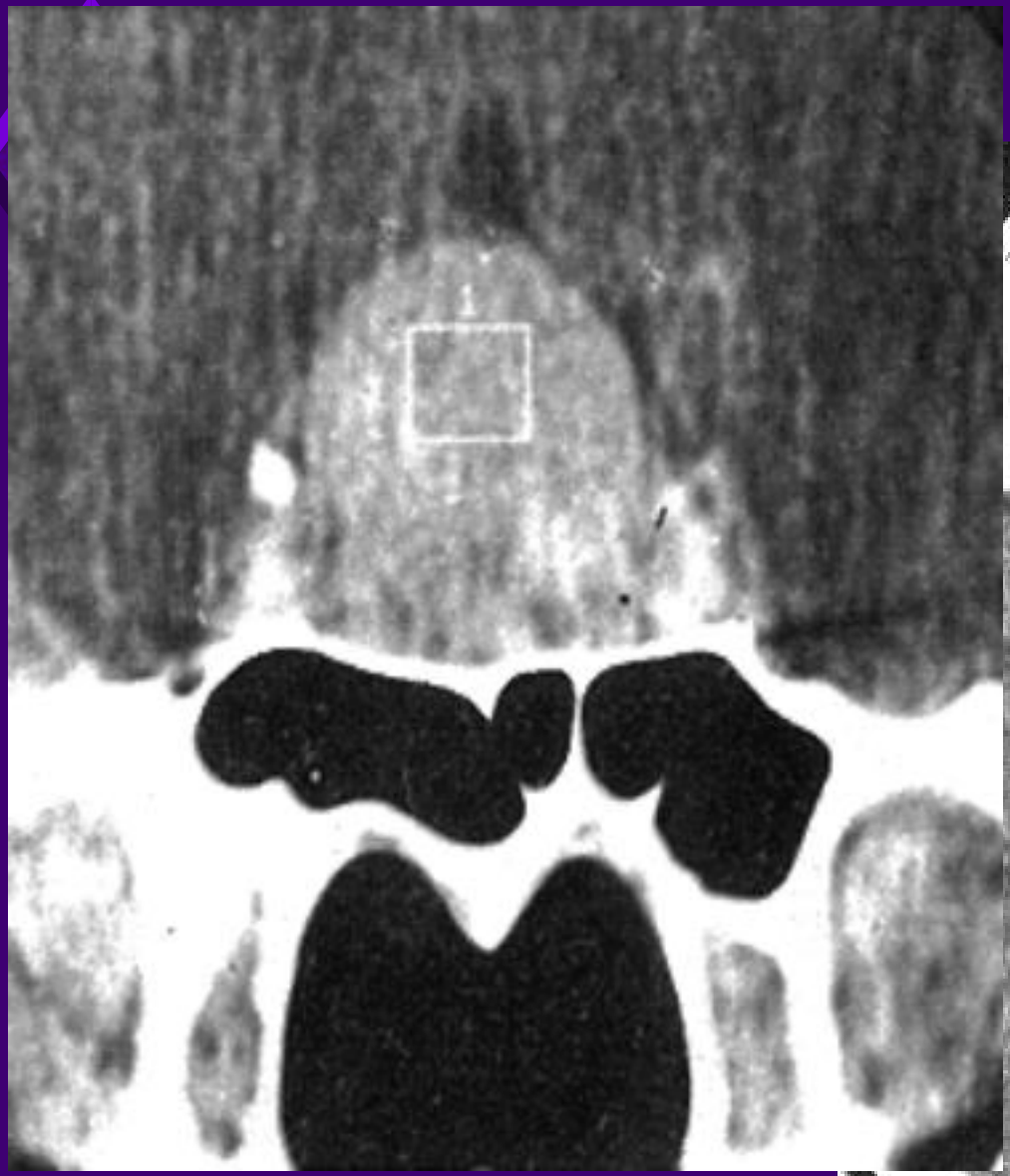
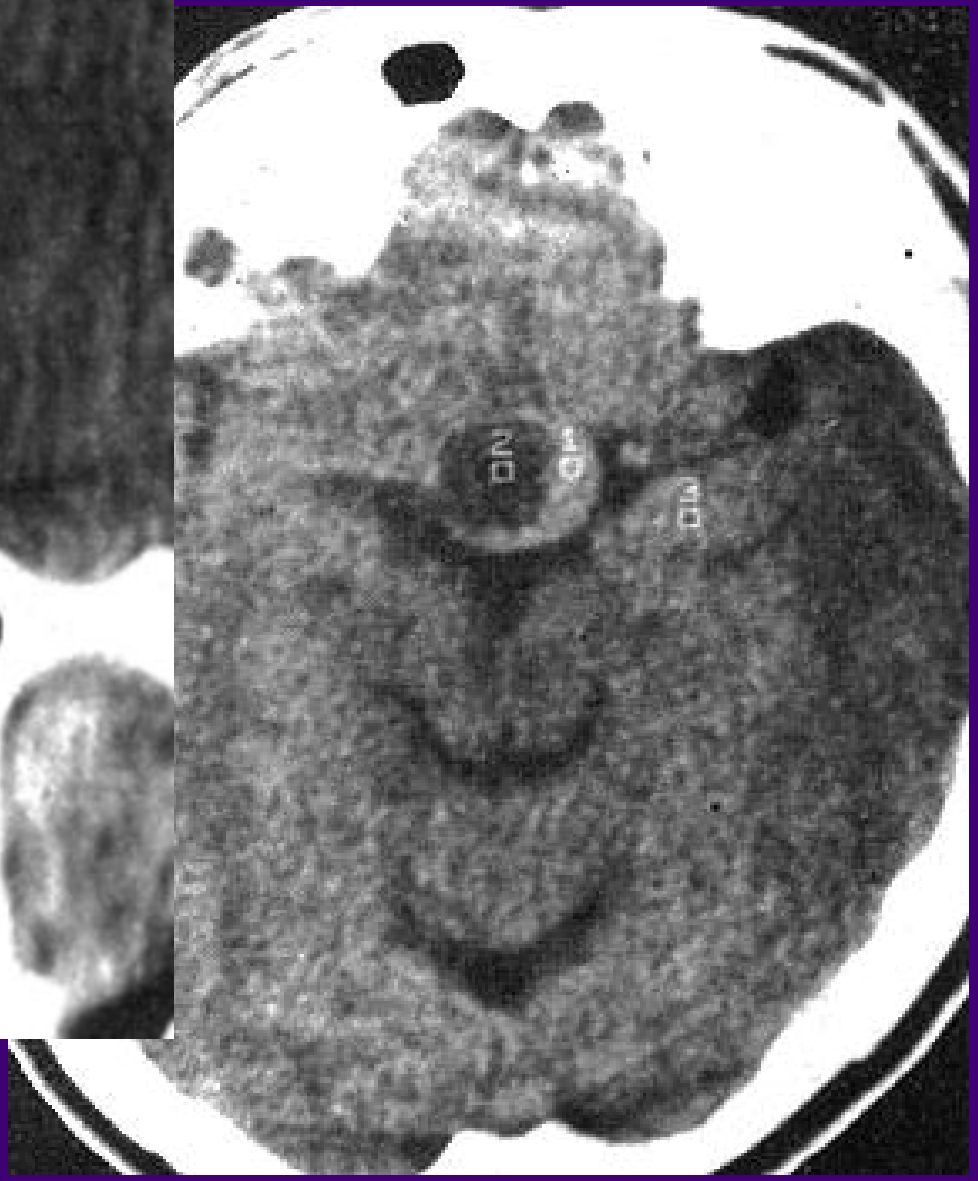
= 76
= 258
815:16
PR/HF/
FC20/OR

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D1
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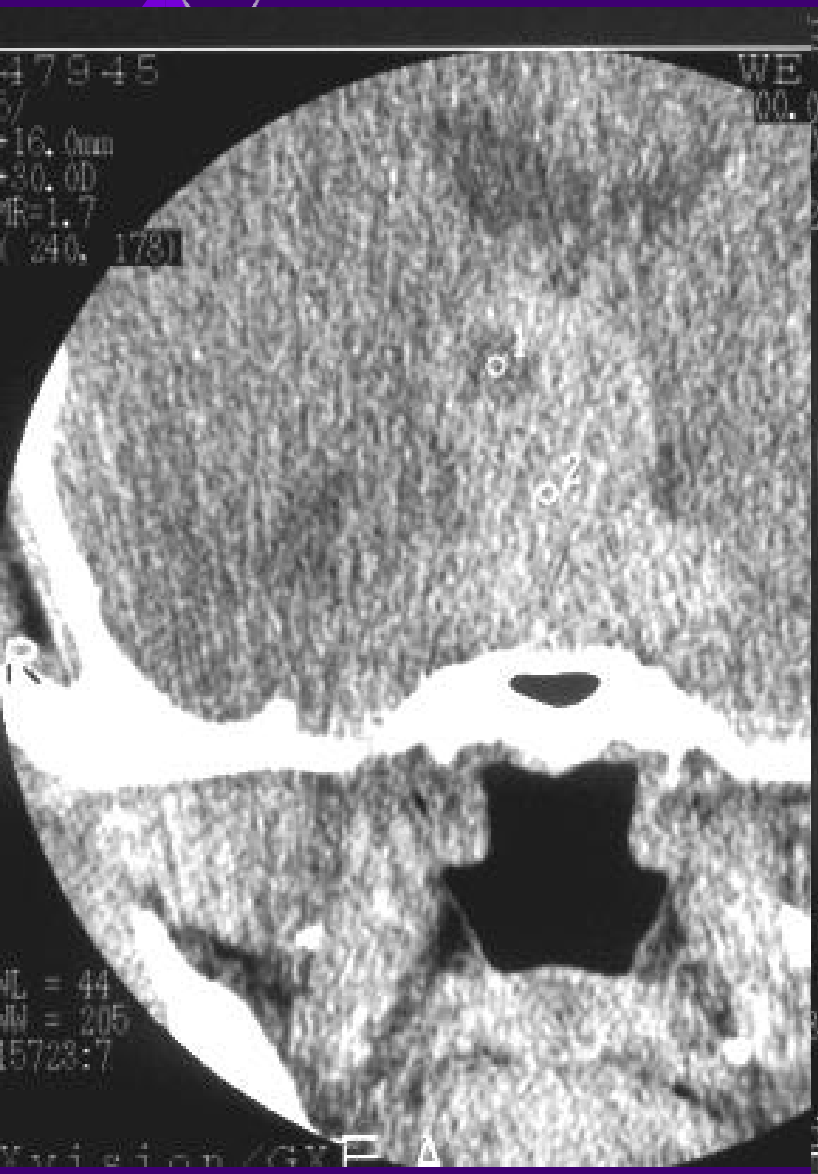
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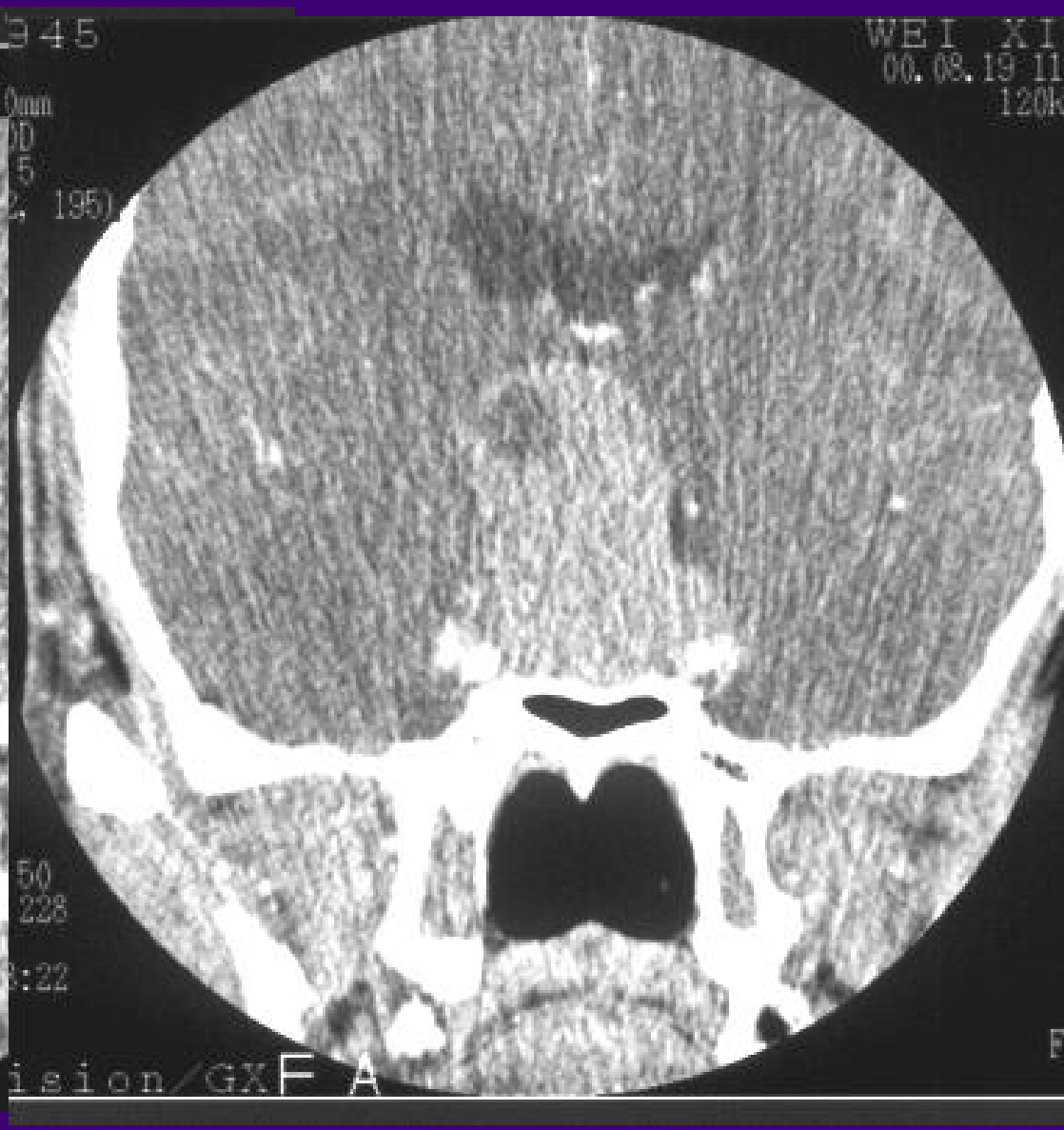
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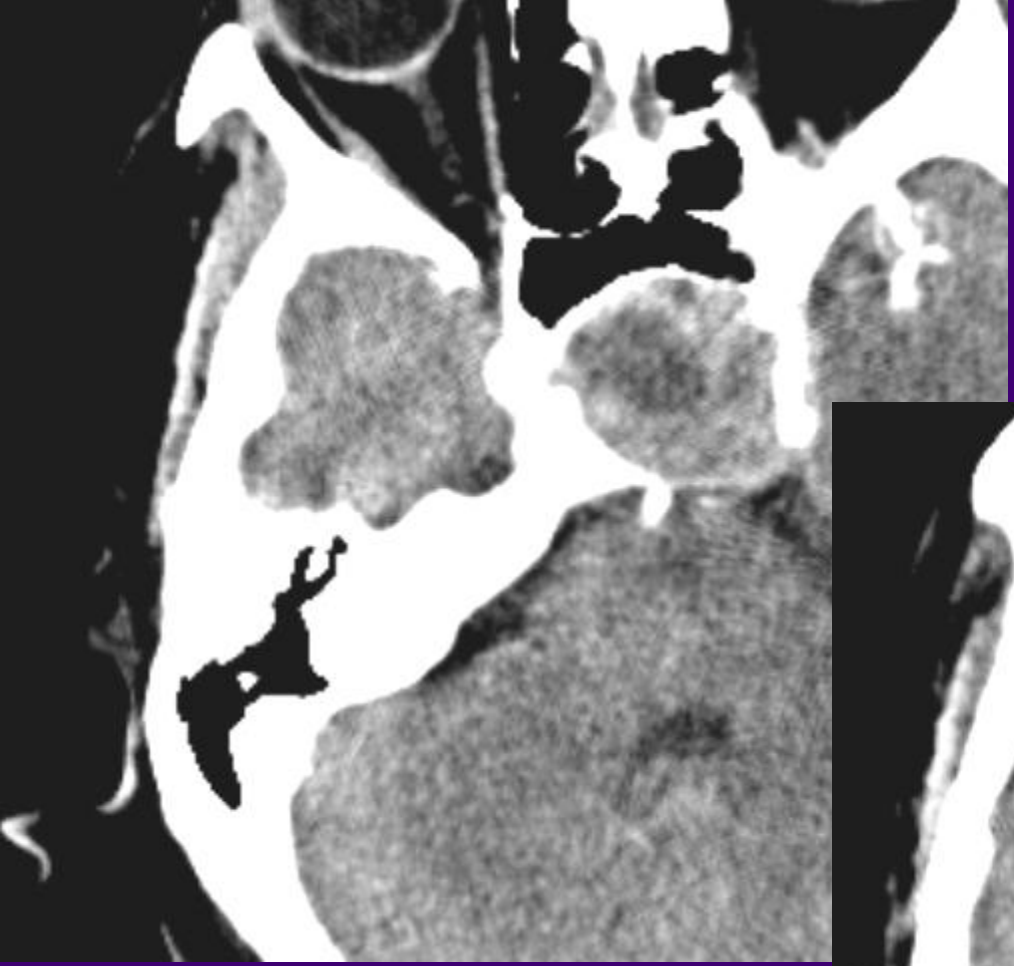
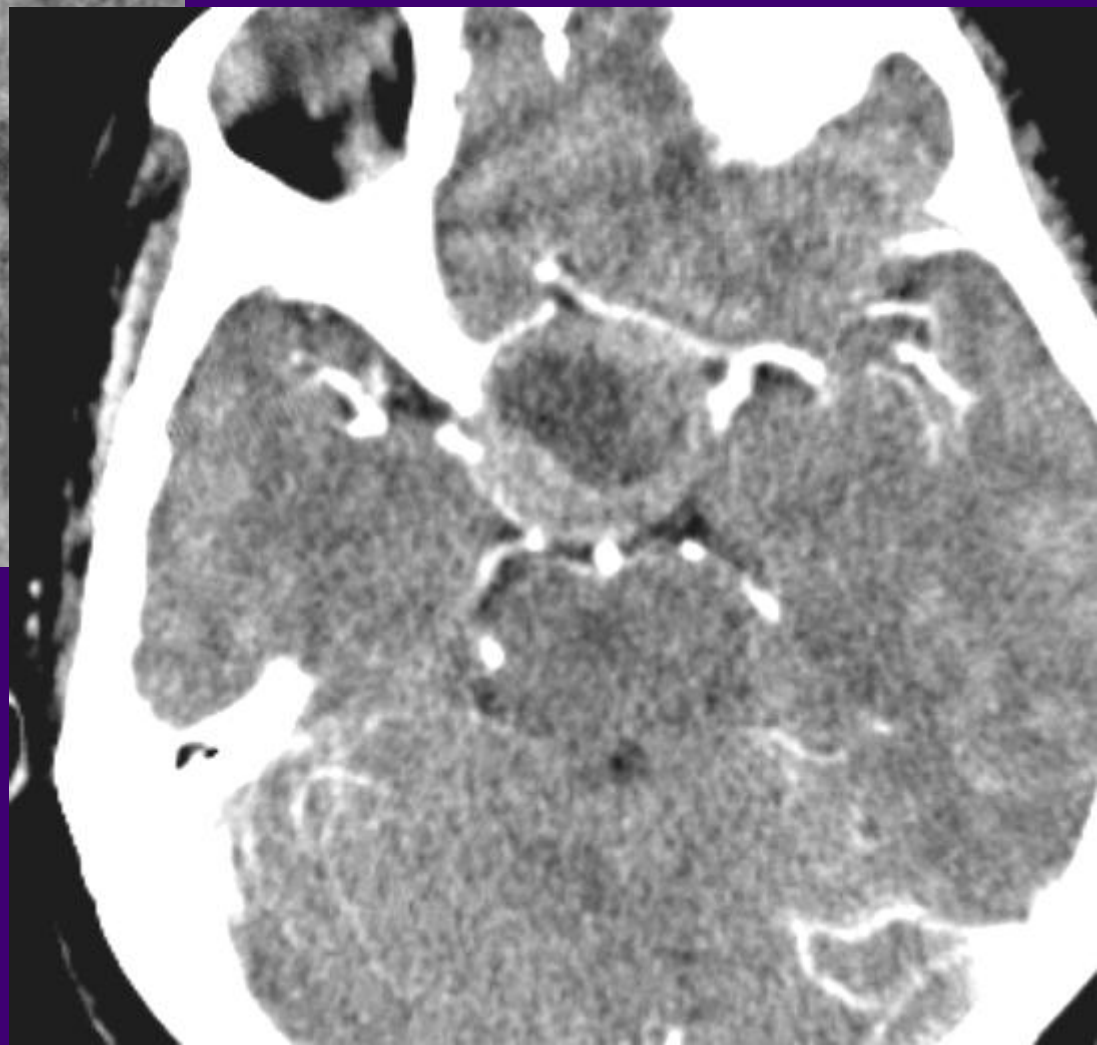
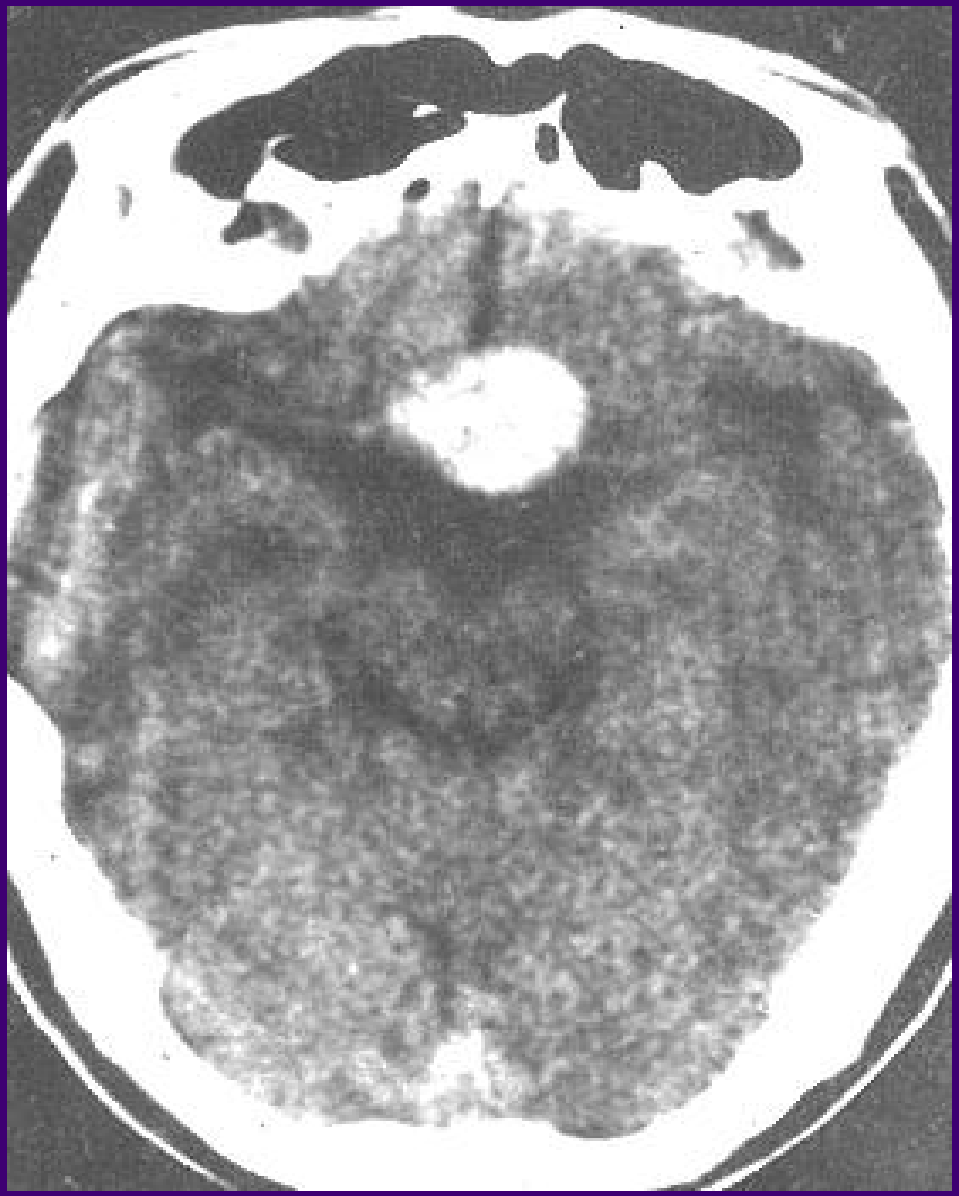
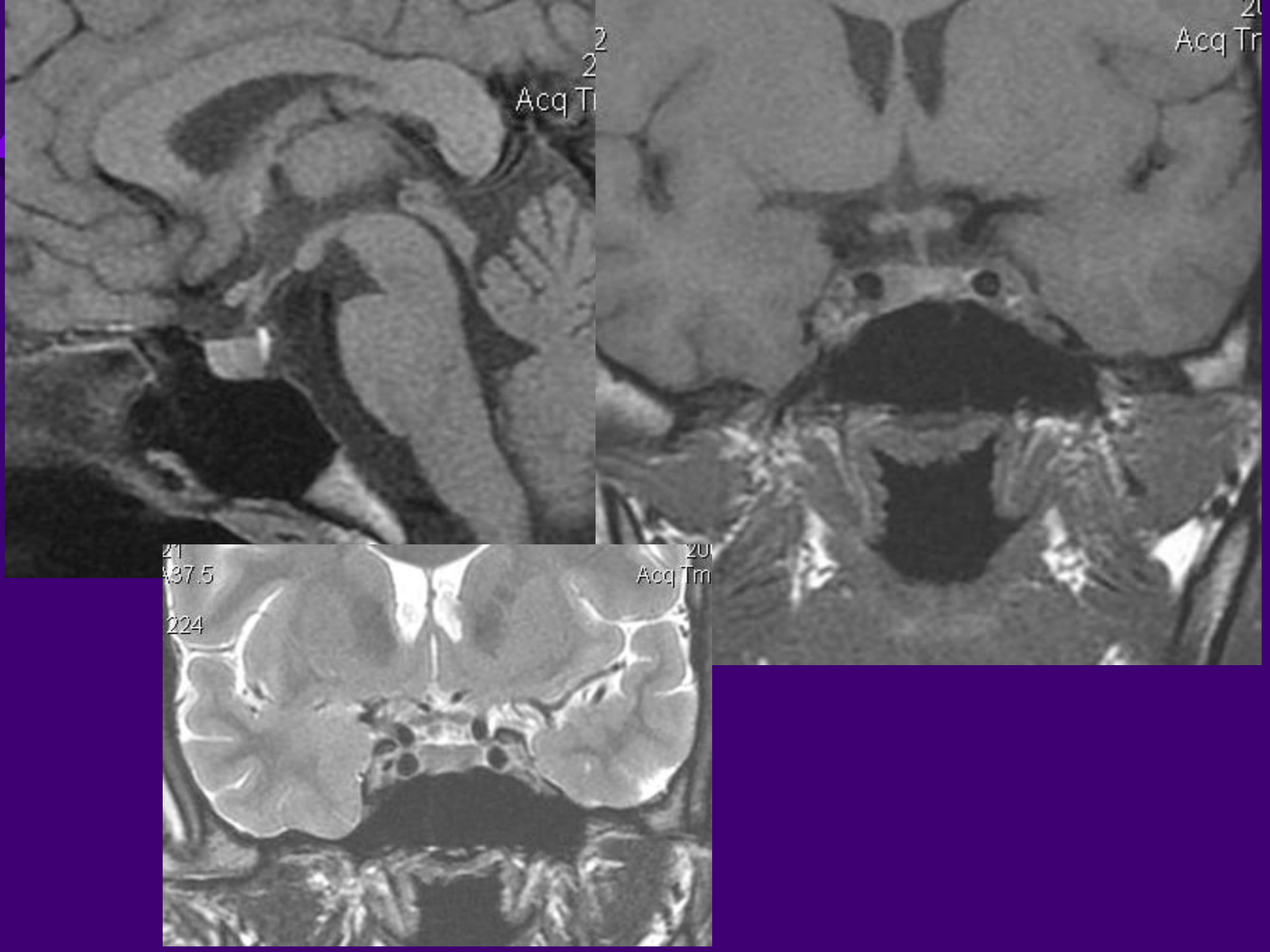


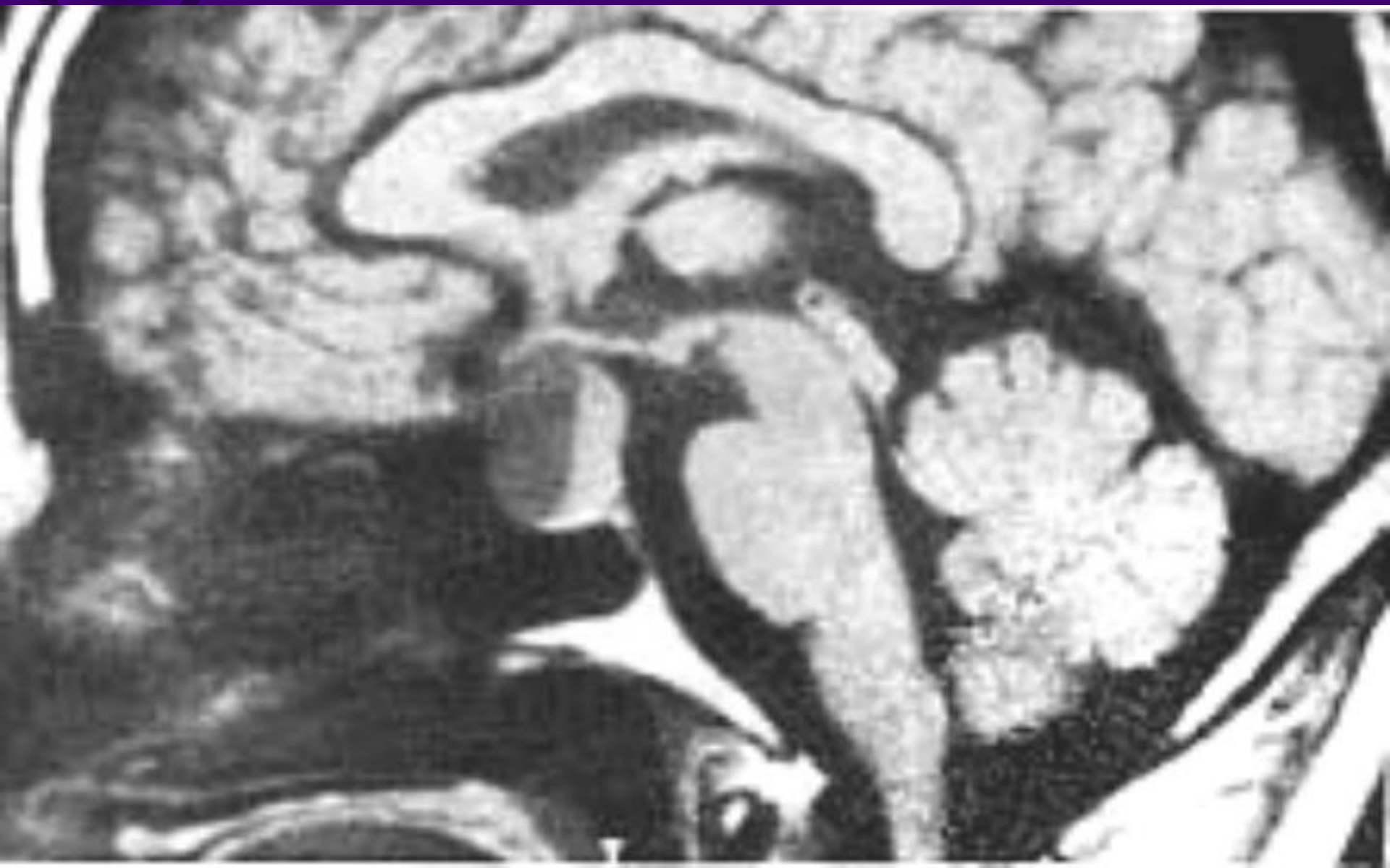


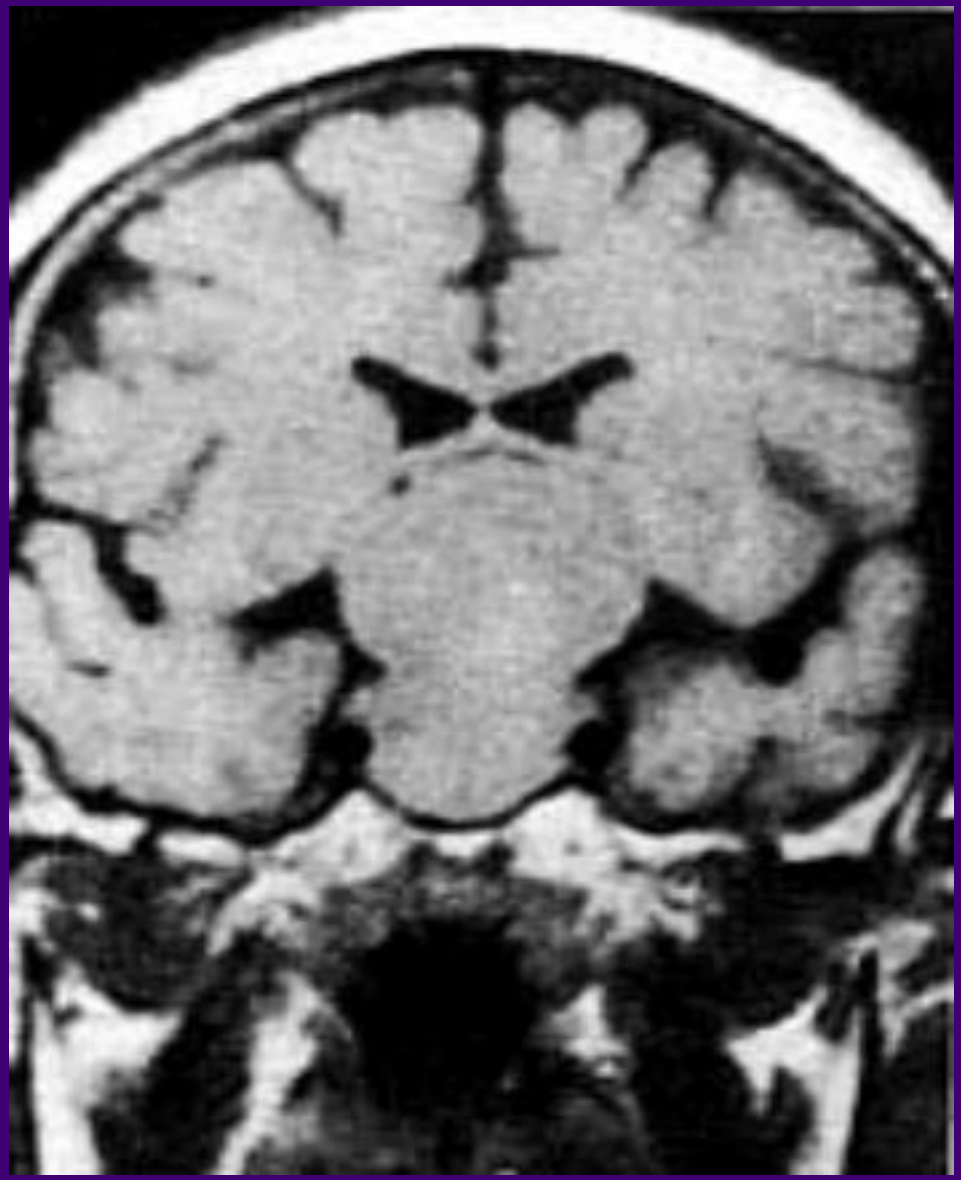


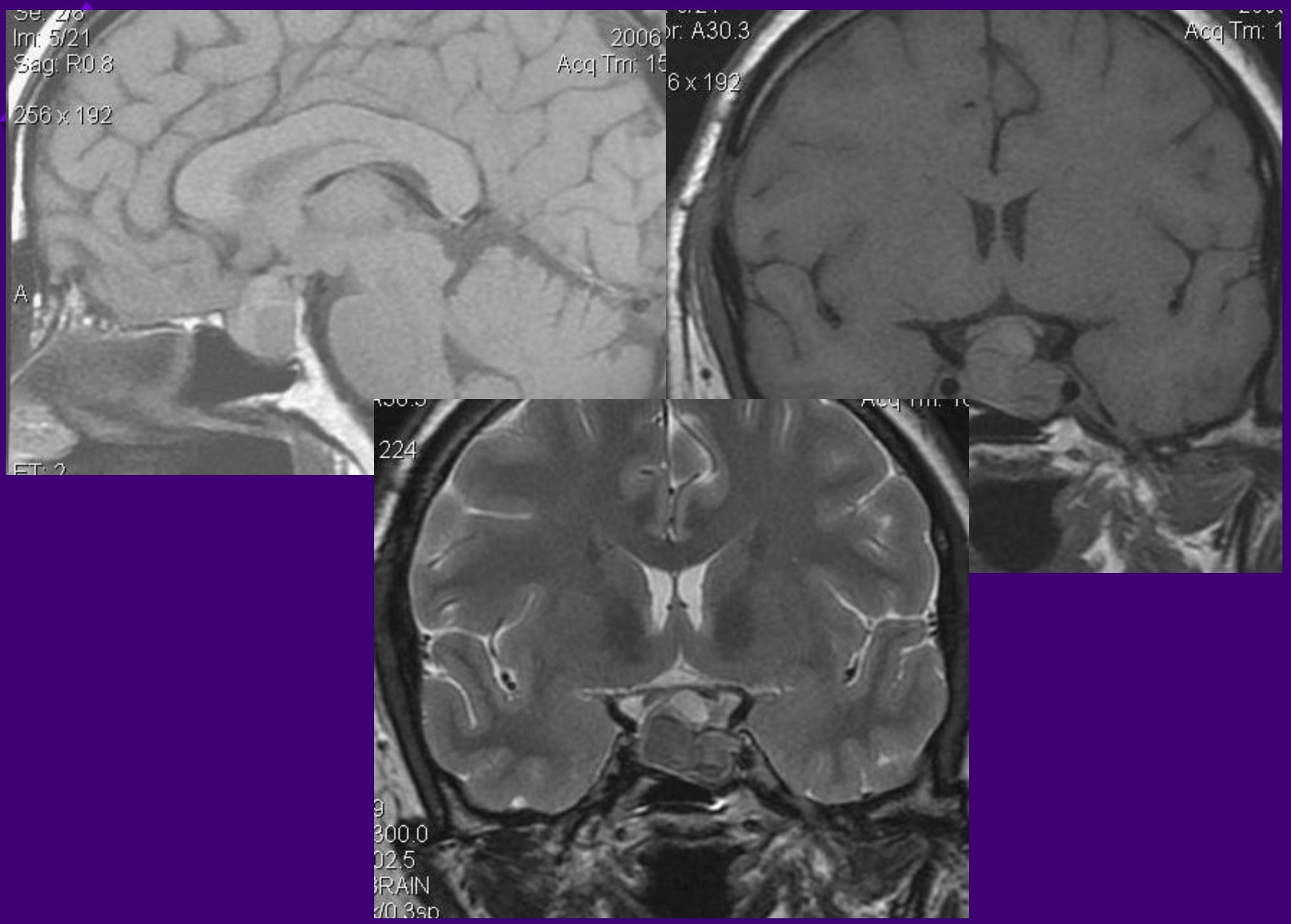
垂体瘤卒中



垂体大腺瘤—MRI表现



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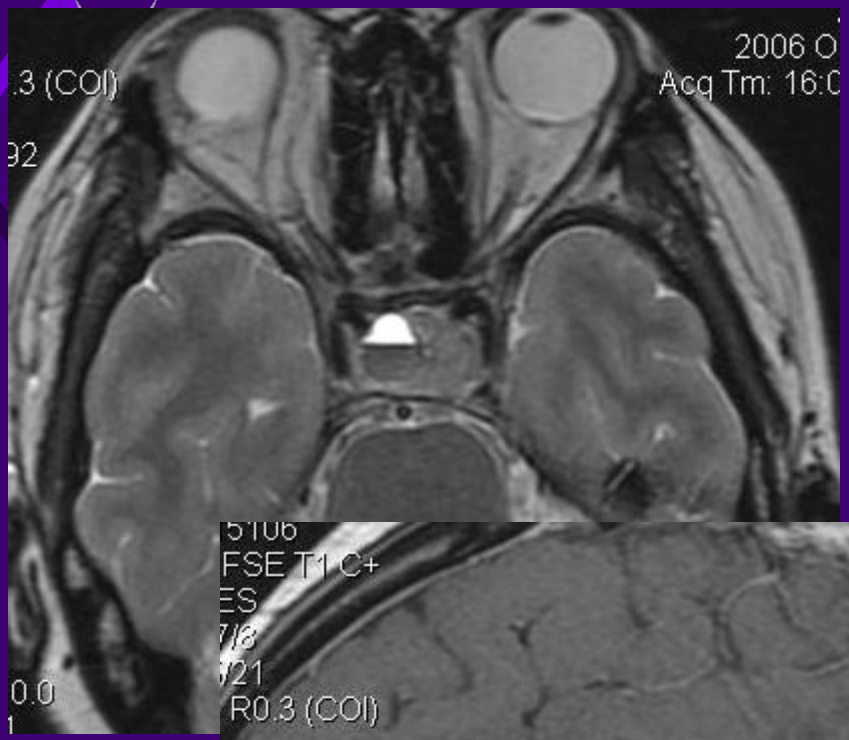
RAIN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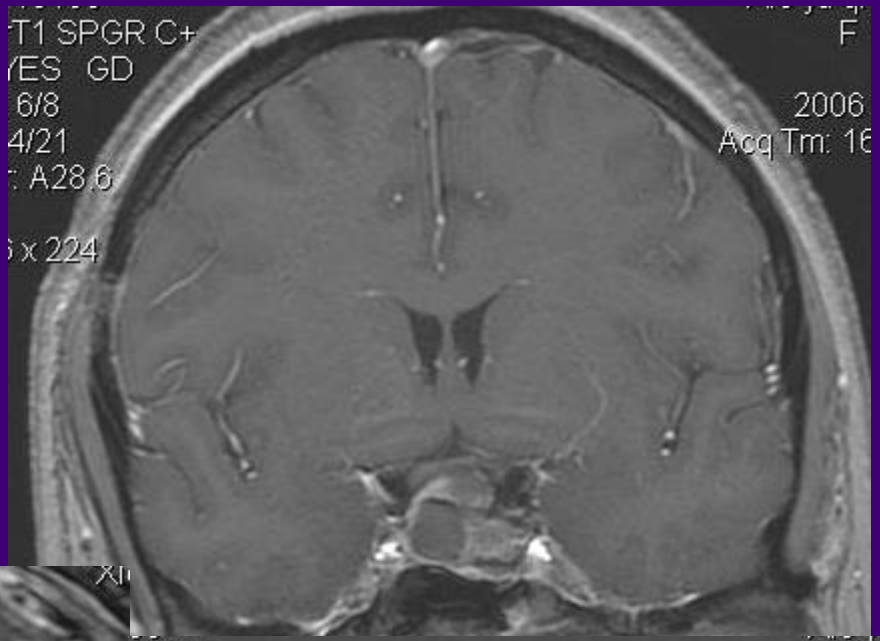
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2006
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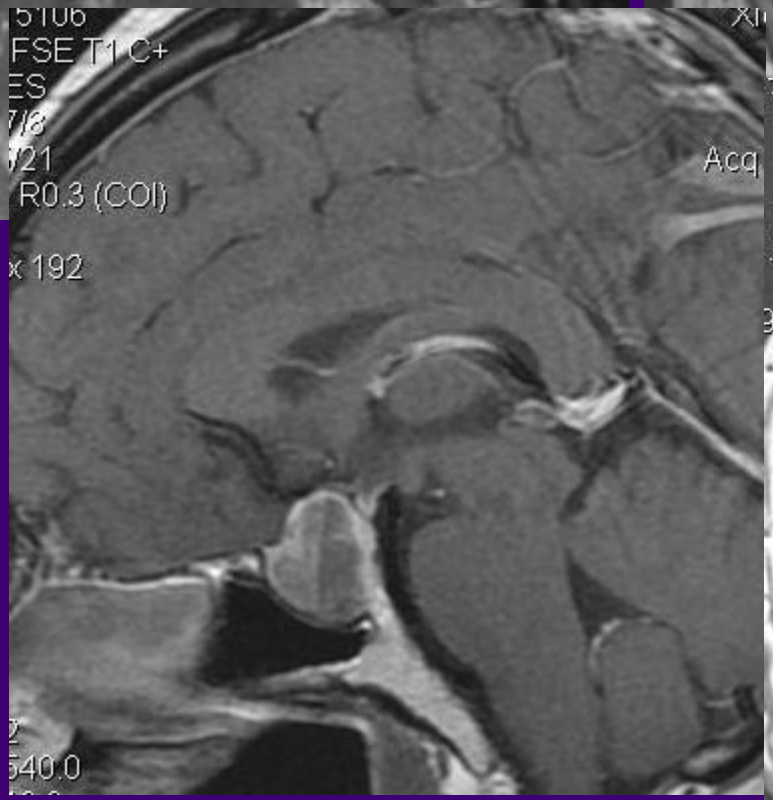
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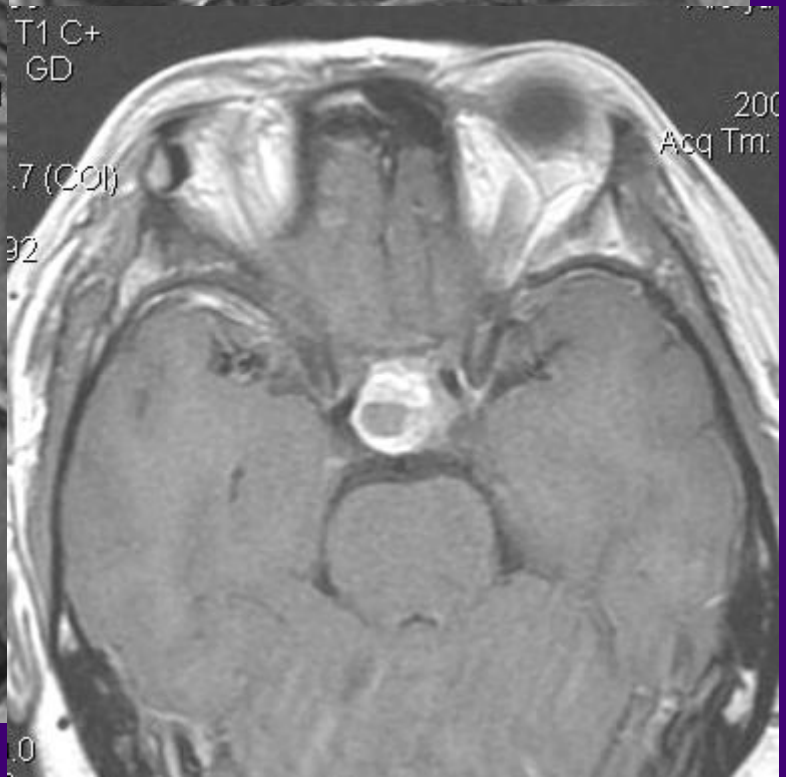
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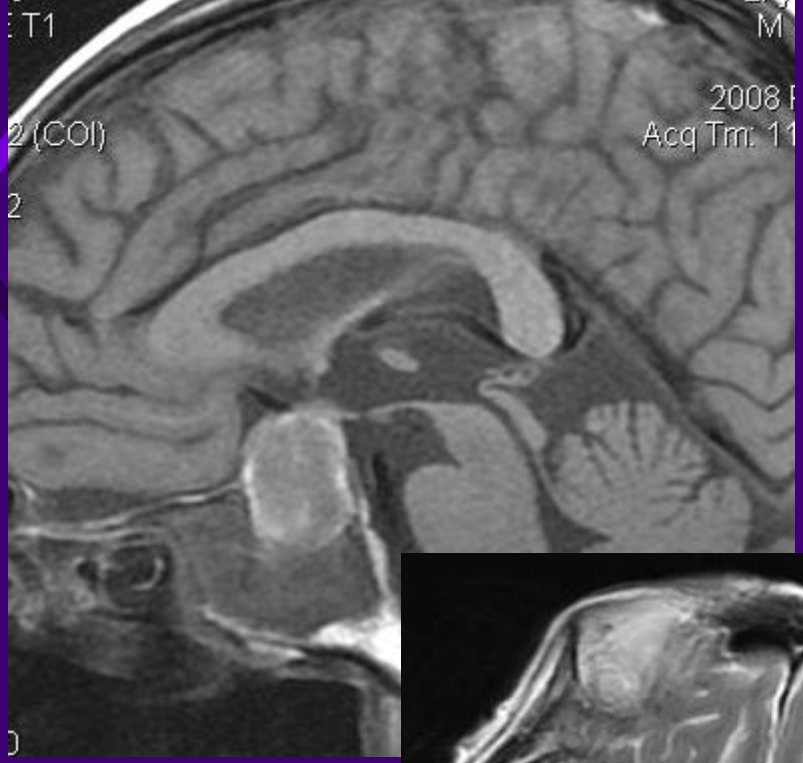
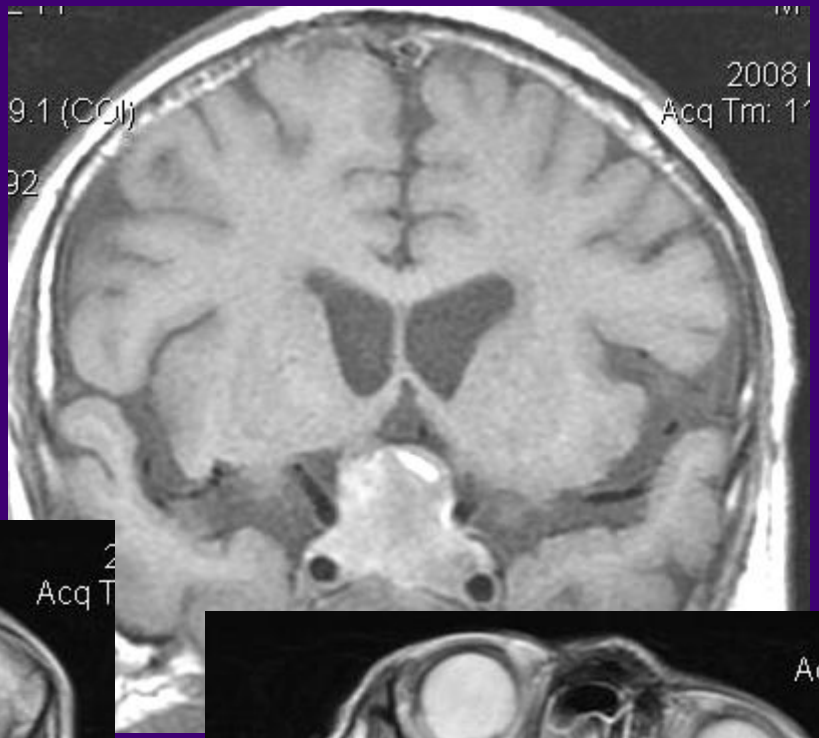
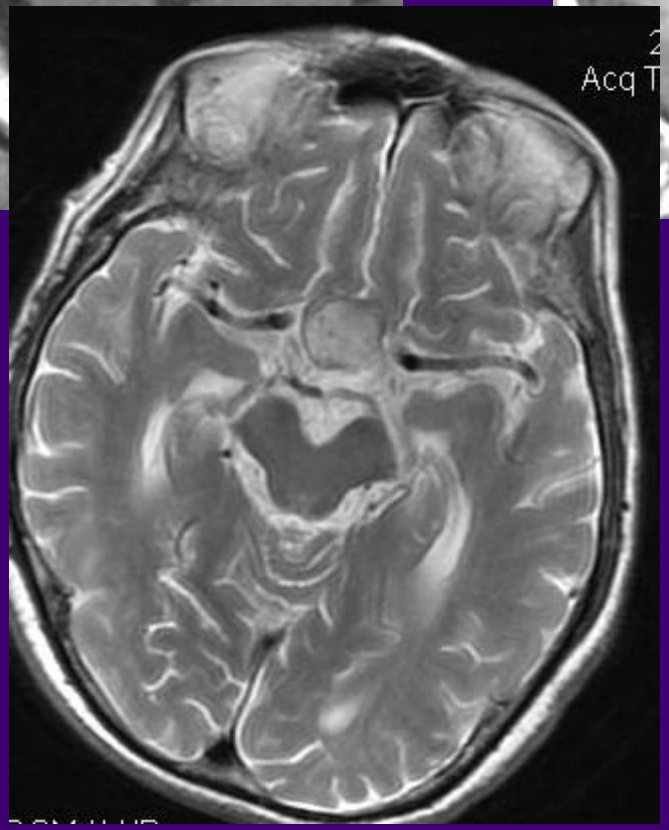
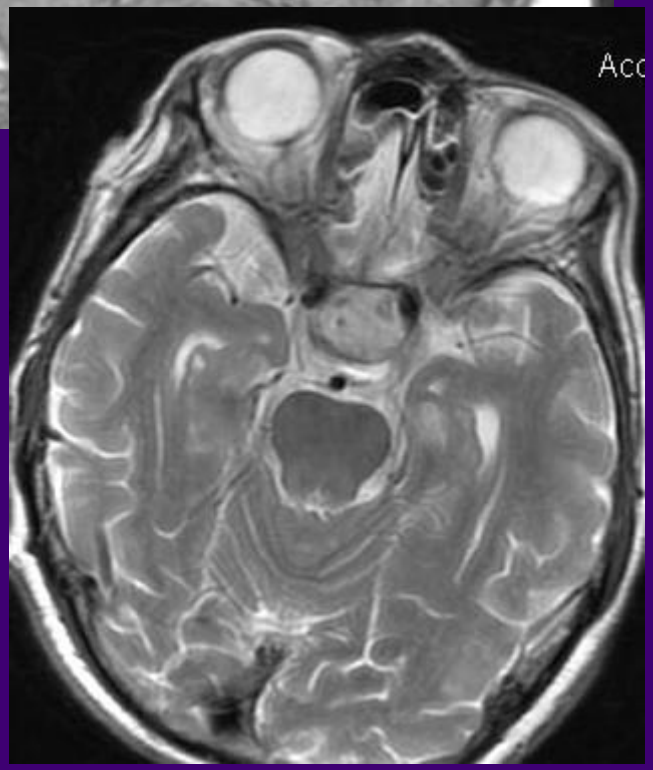








垂体瘤伴出血

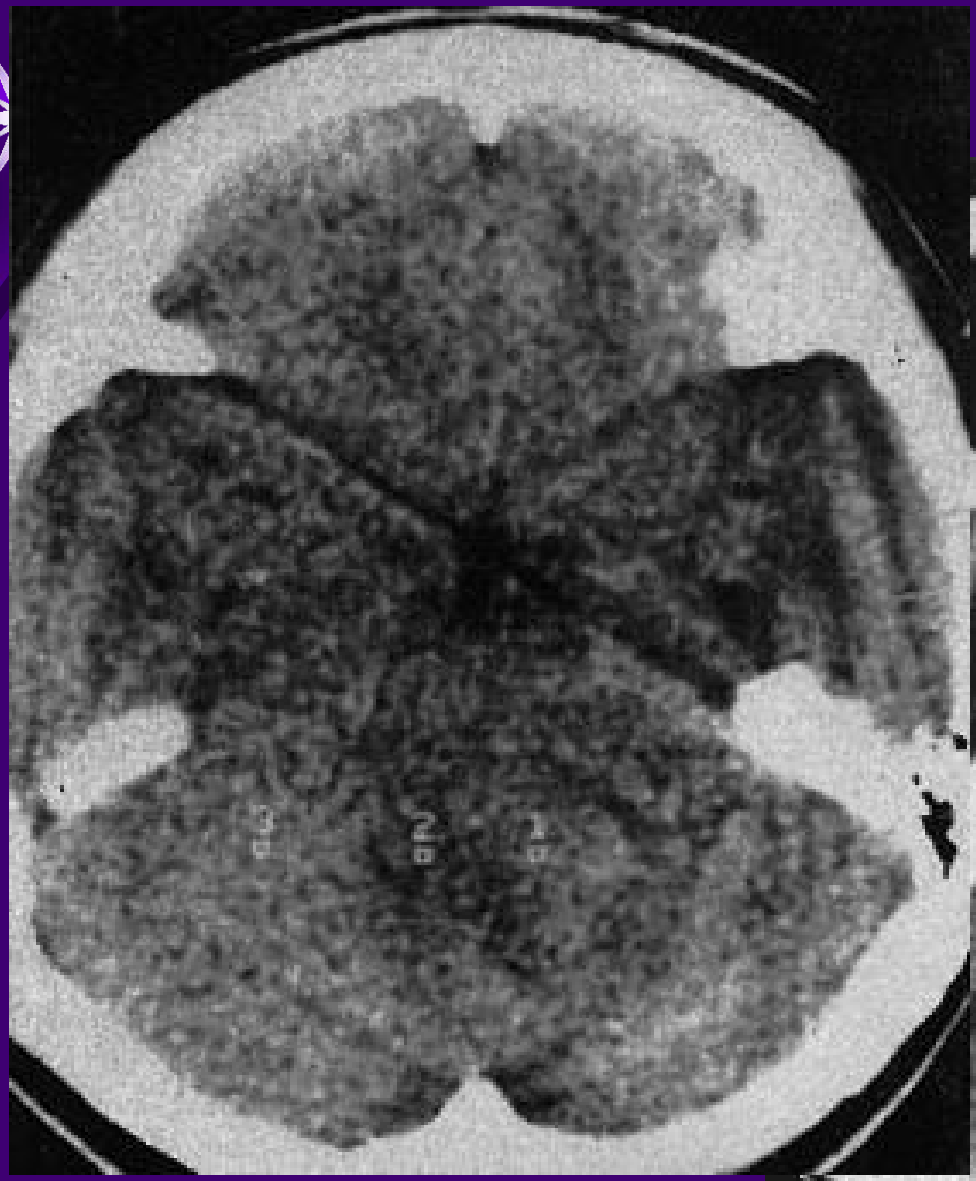
听神经瘤

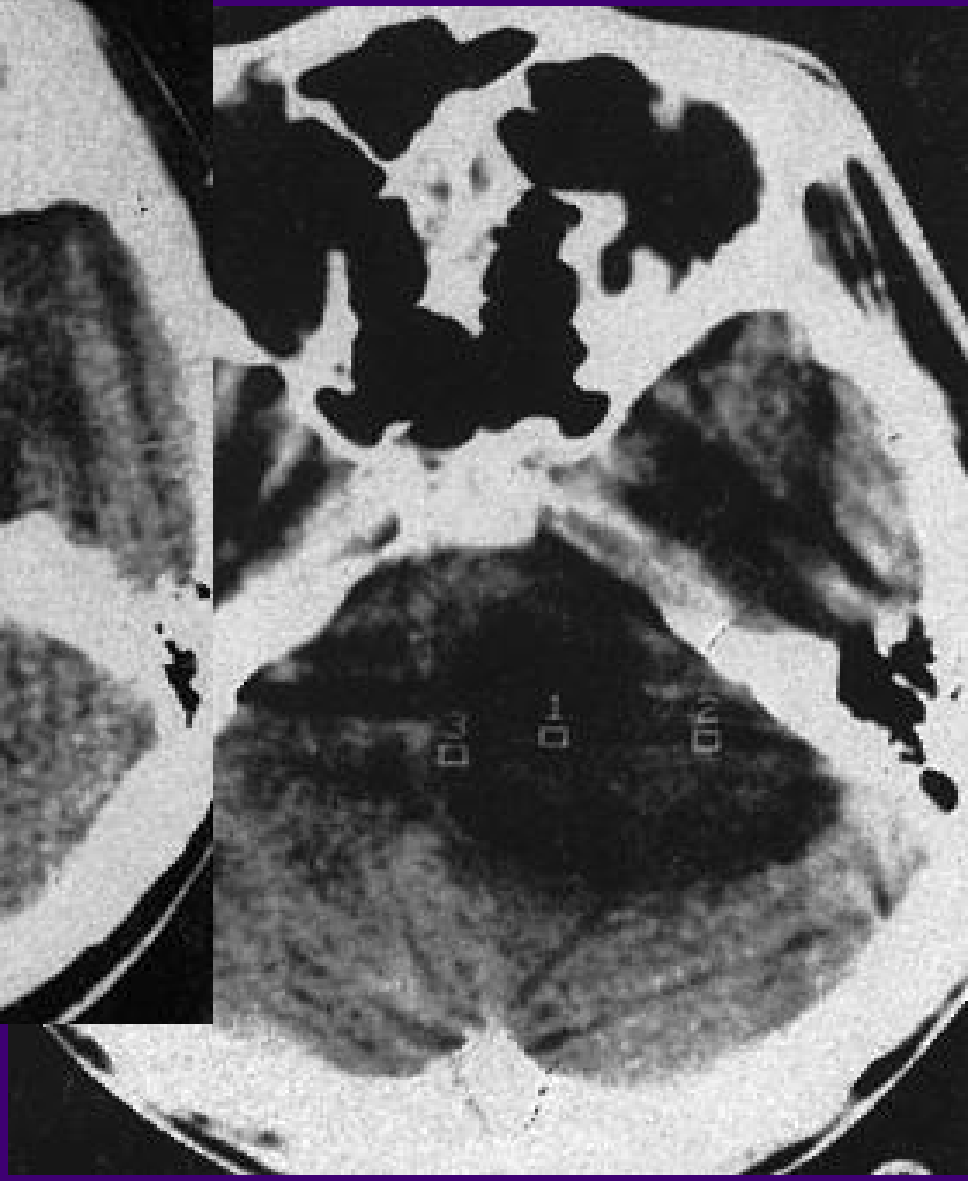
(1)、临床常有听力下降表现

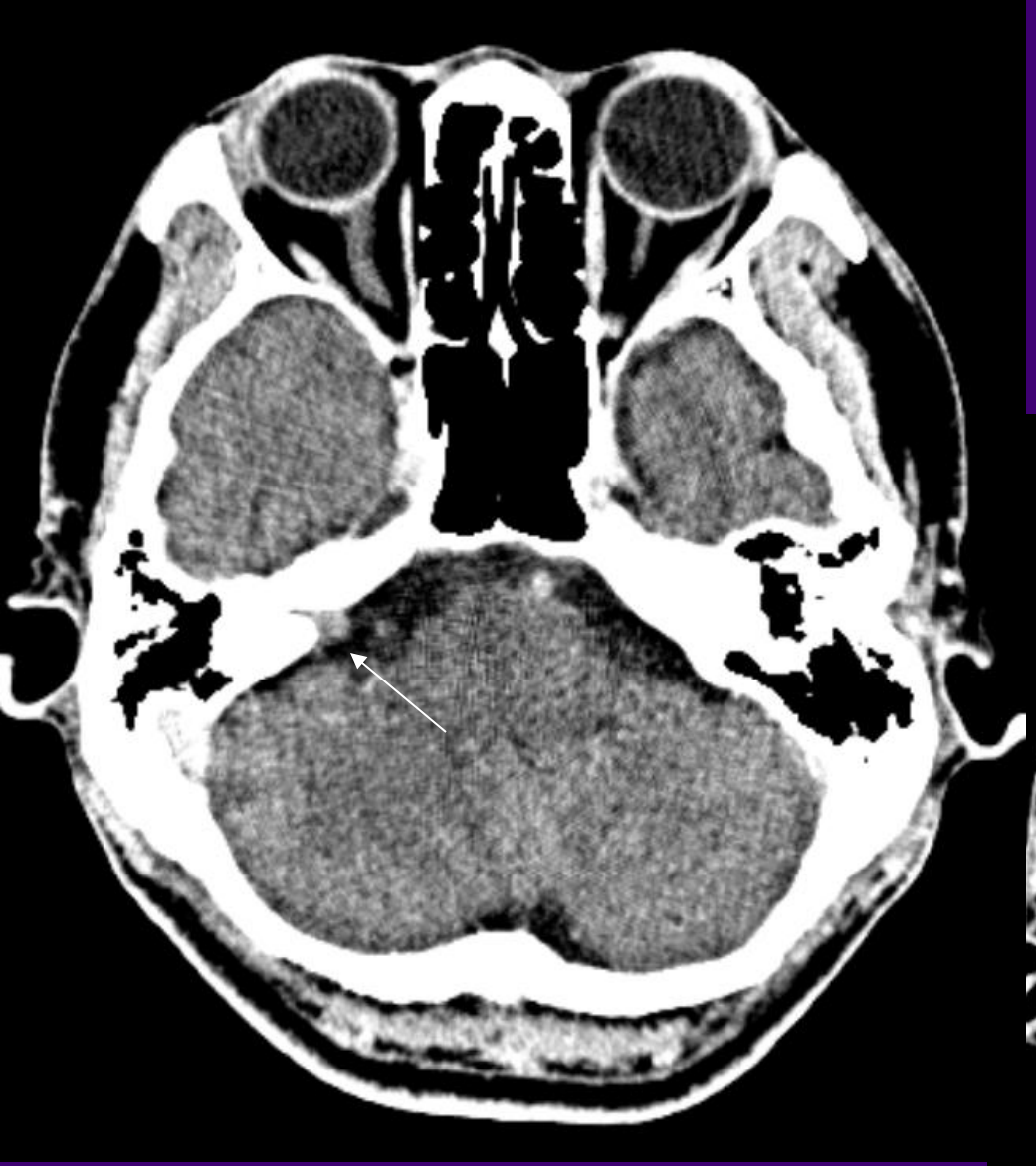
(2)、病变位于桥小脑角；

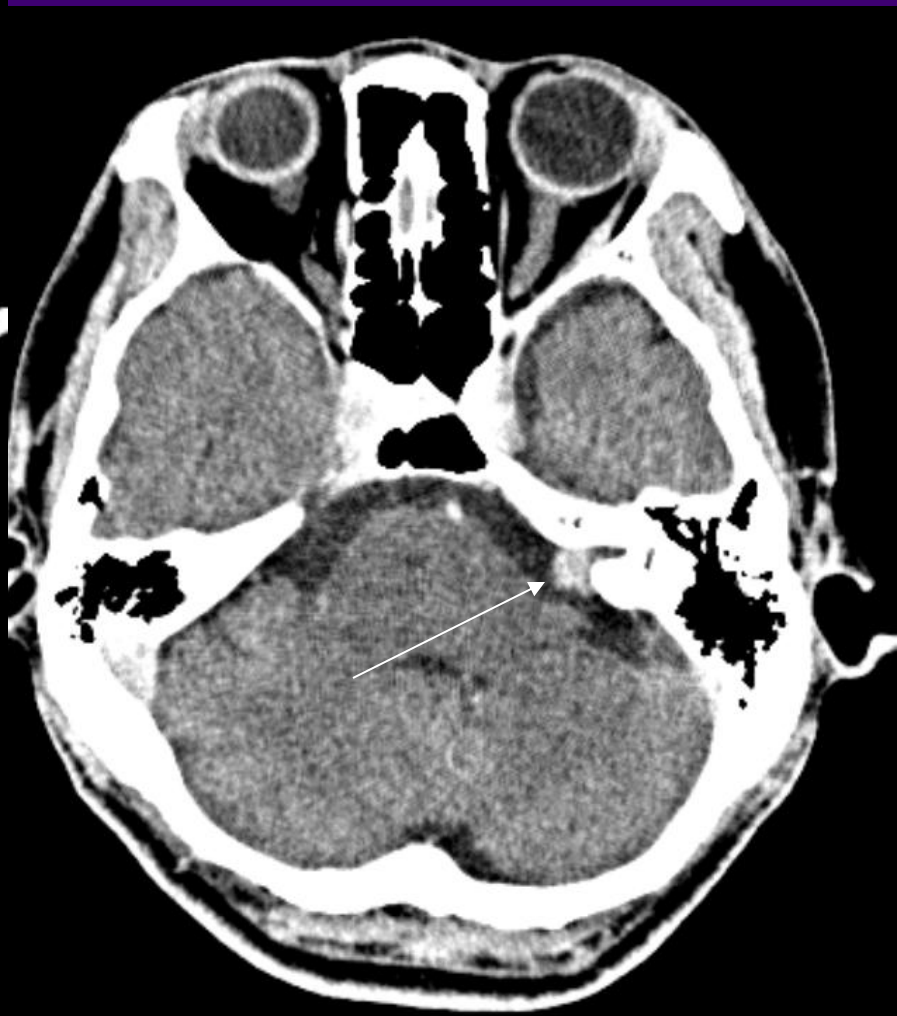
(3)、CT或MRI表现为囊实性团块影；增强实质部分有强化

(4)、常见内听道扩大。

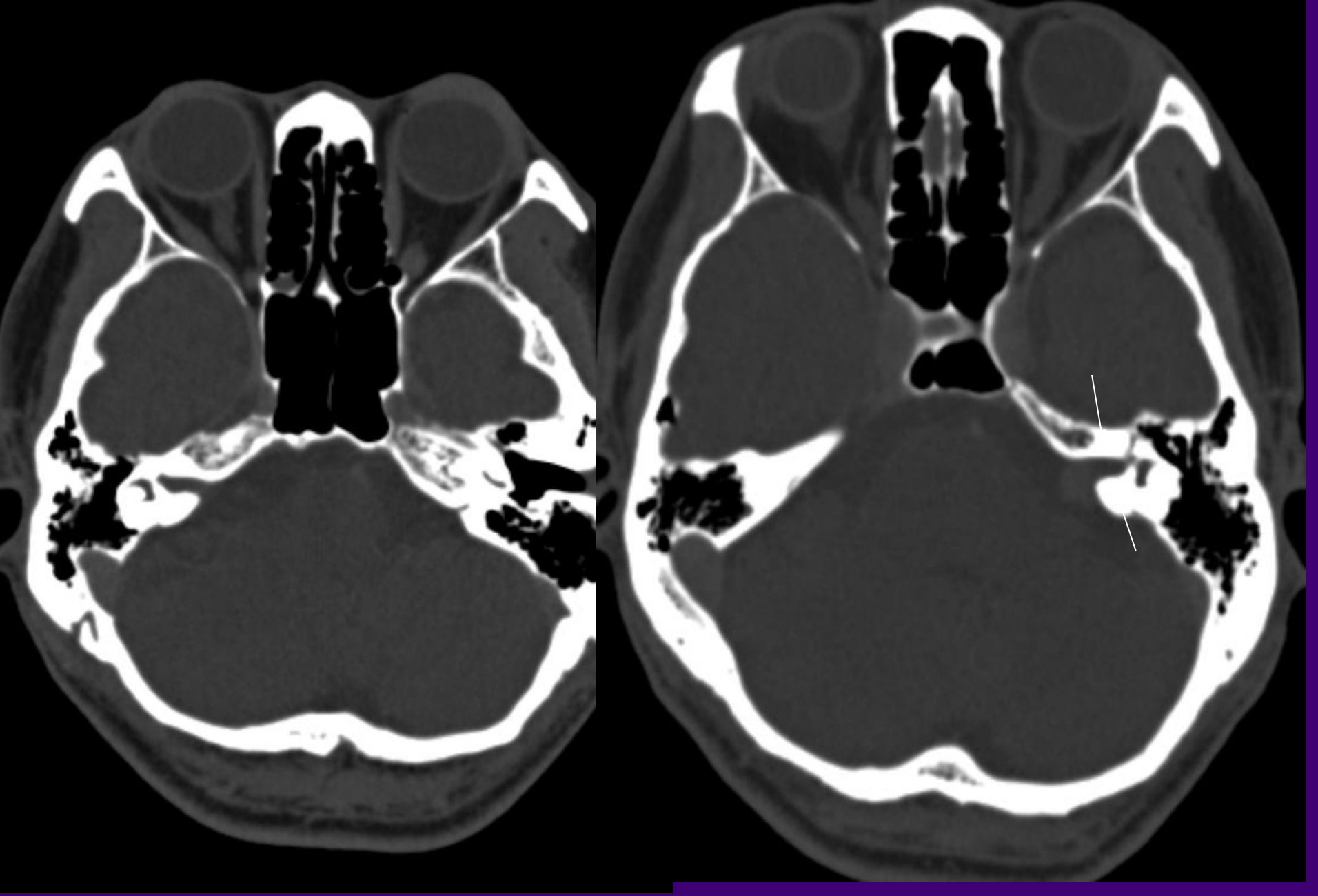


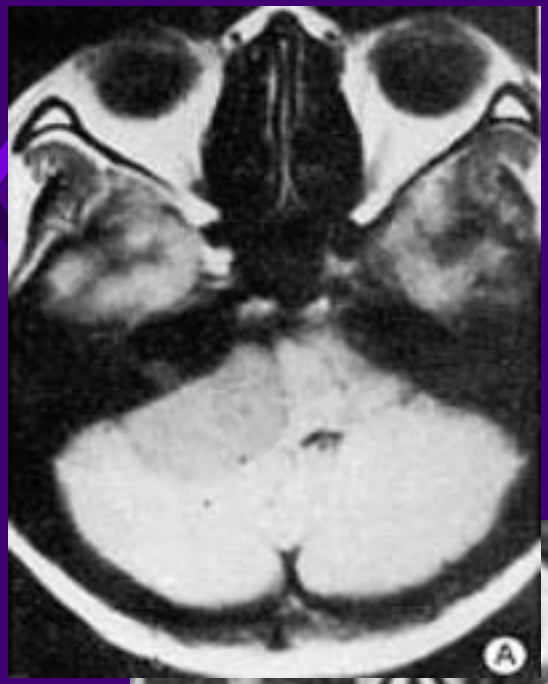






微小听神经瘤

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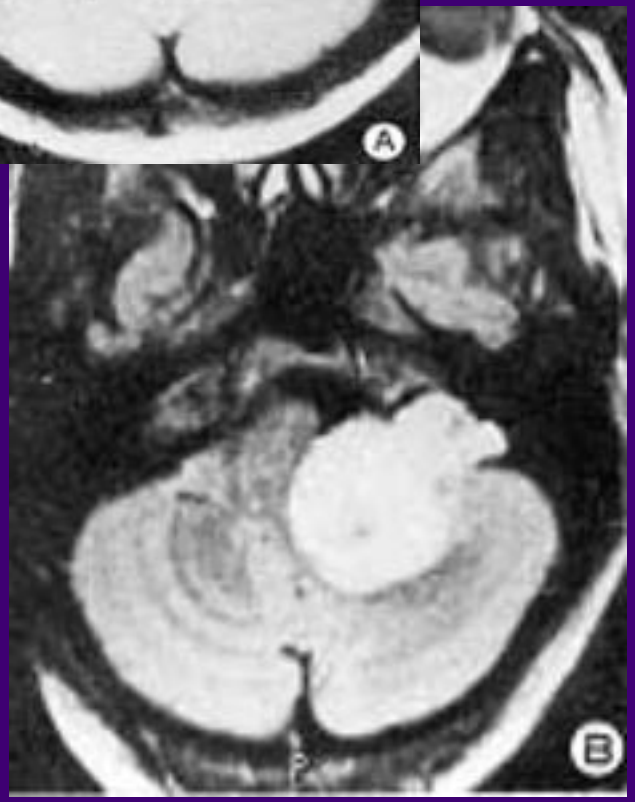
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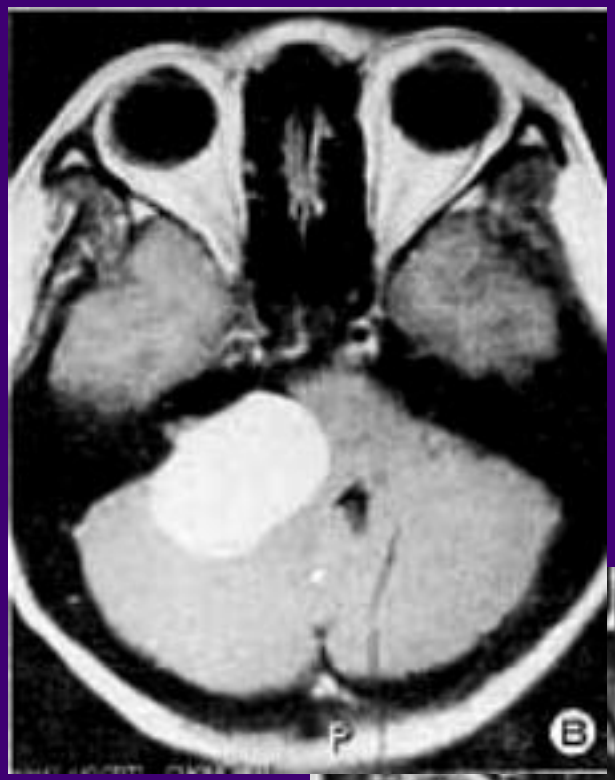
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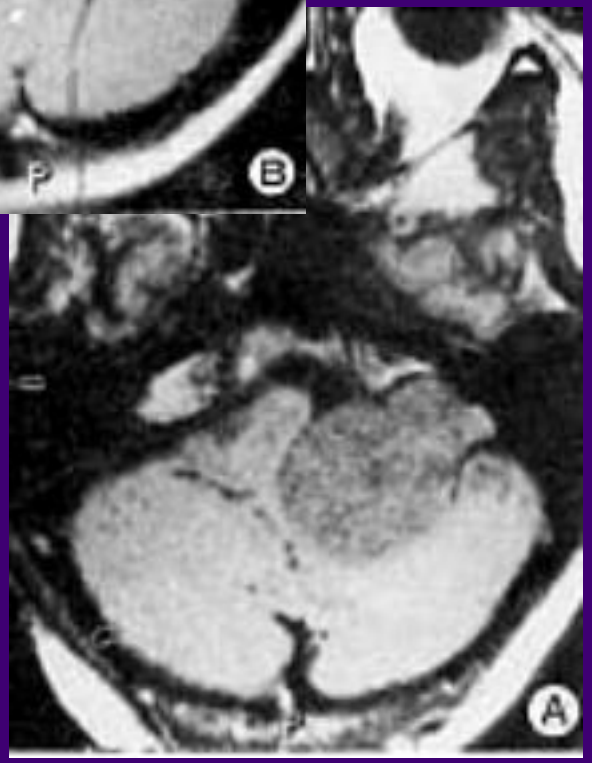
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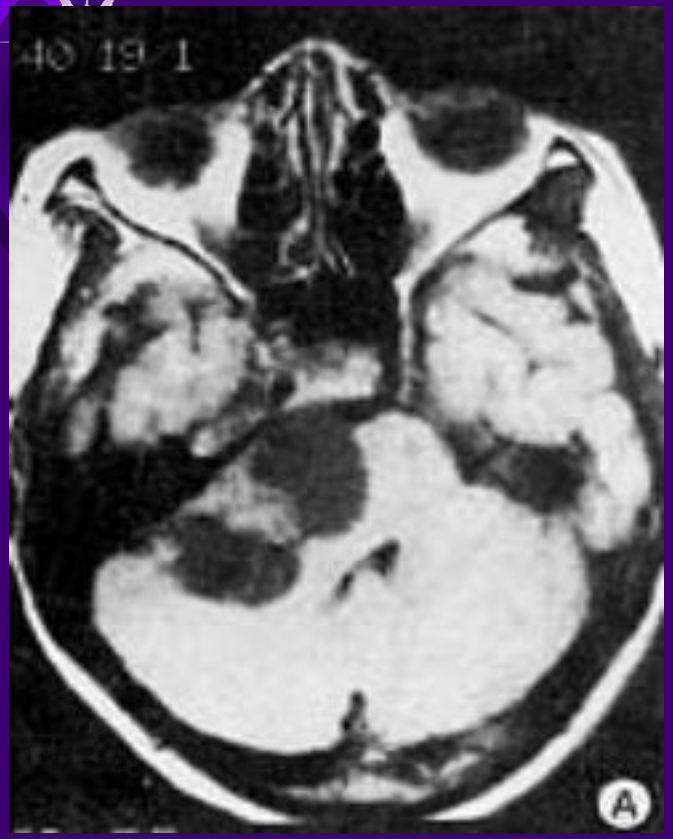
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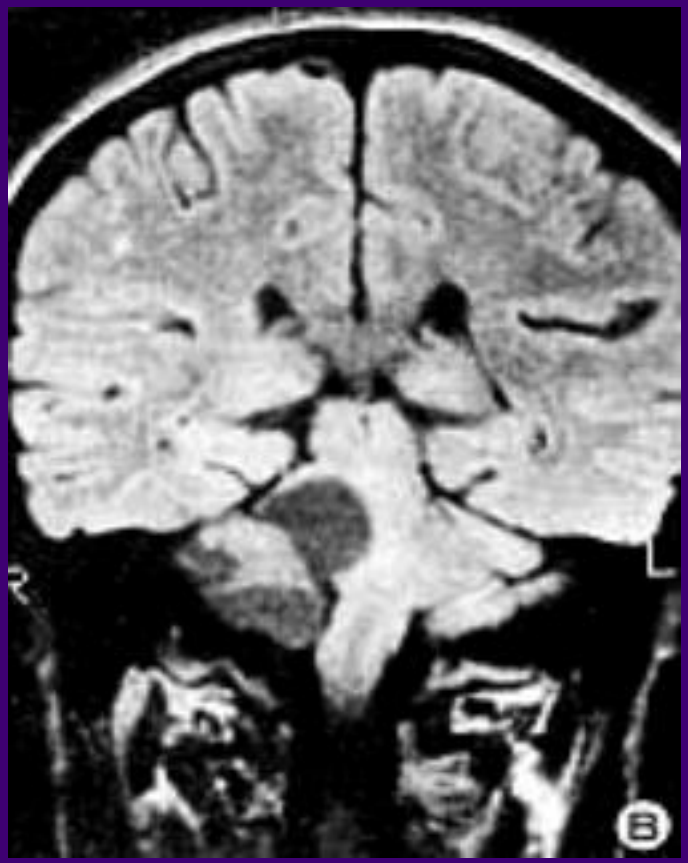
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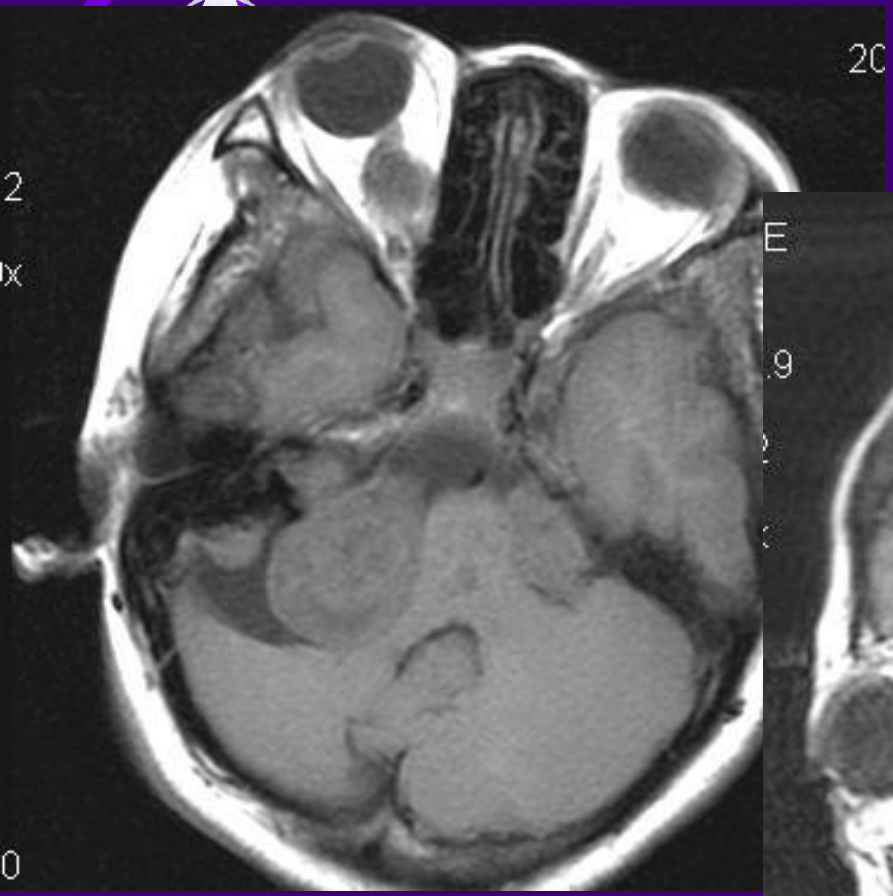

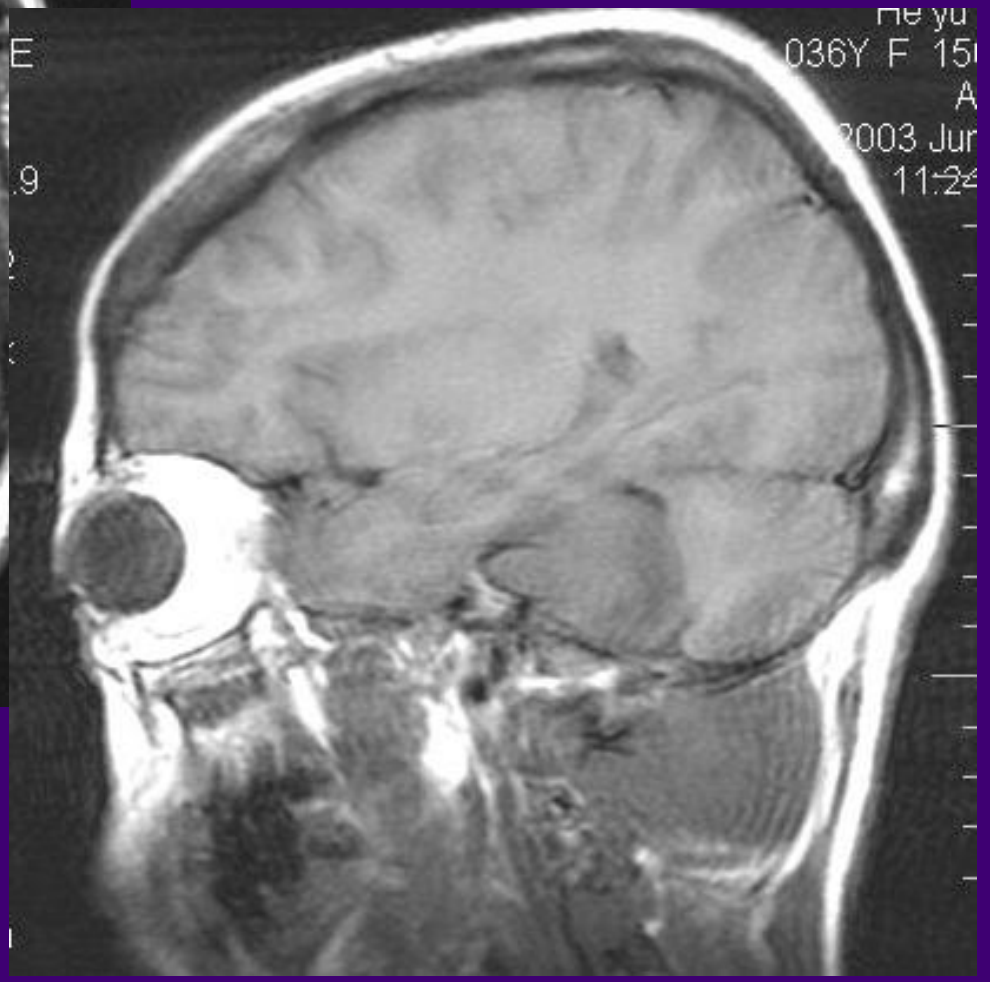

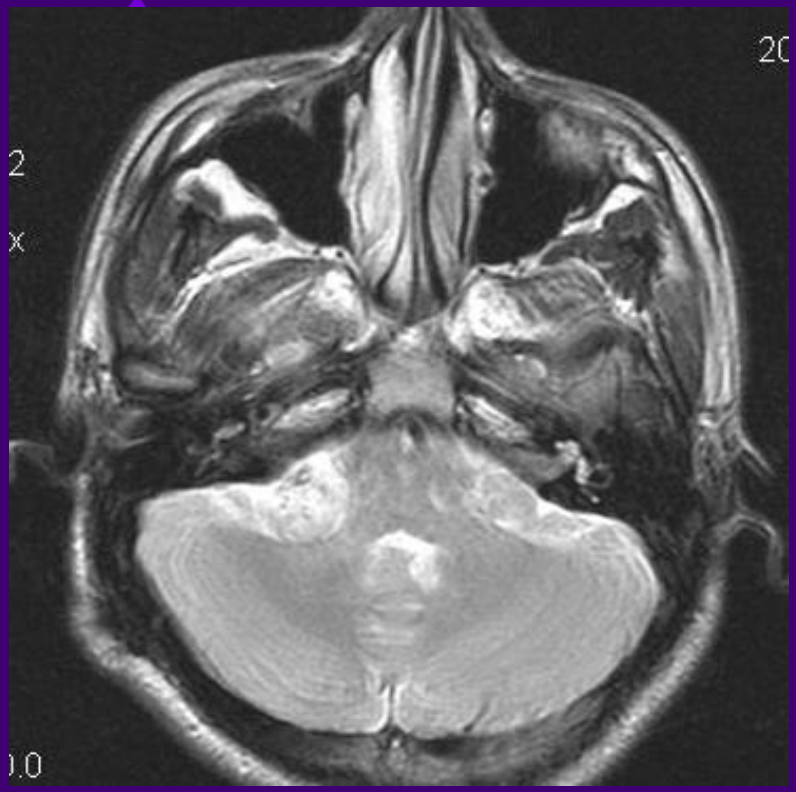

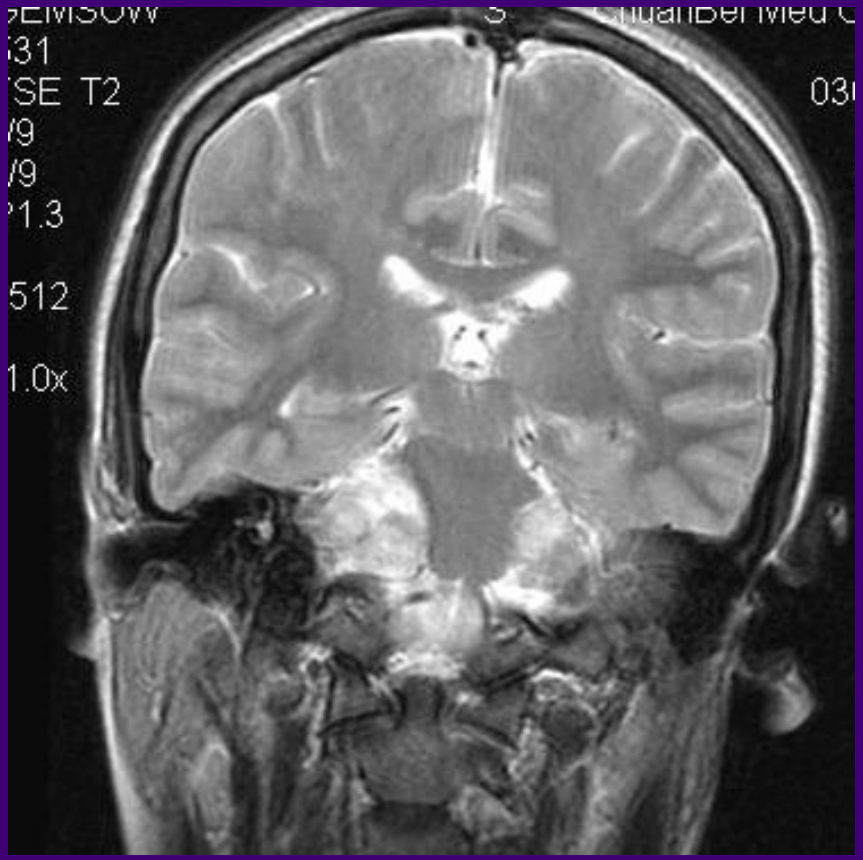
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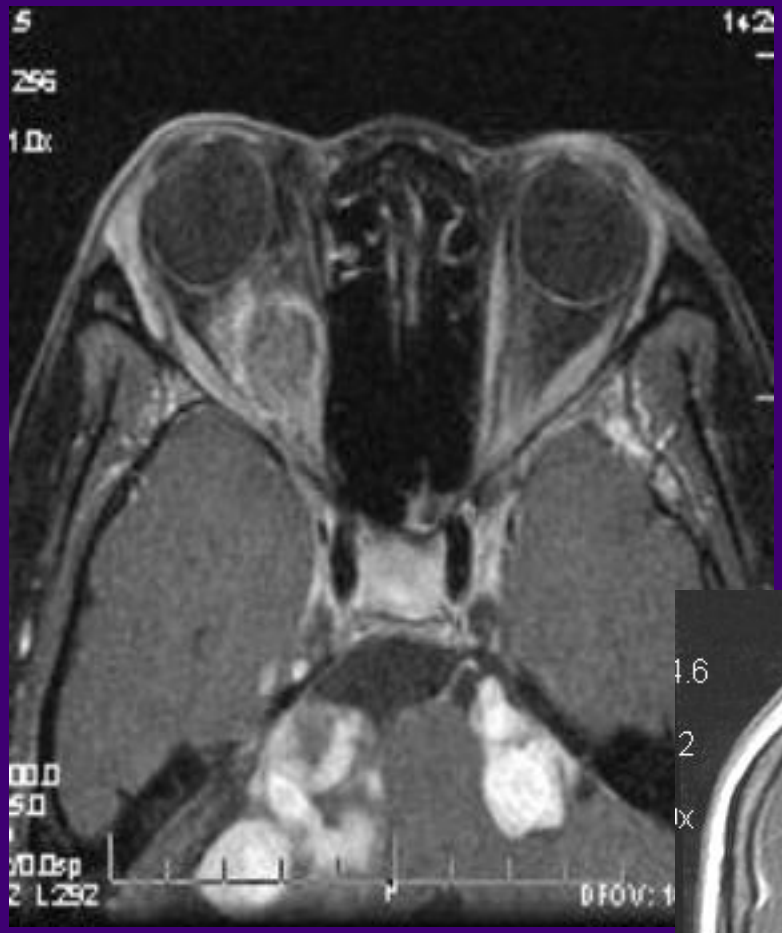

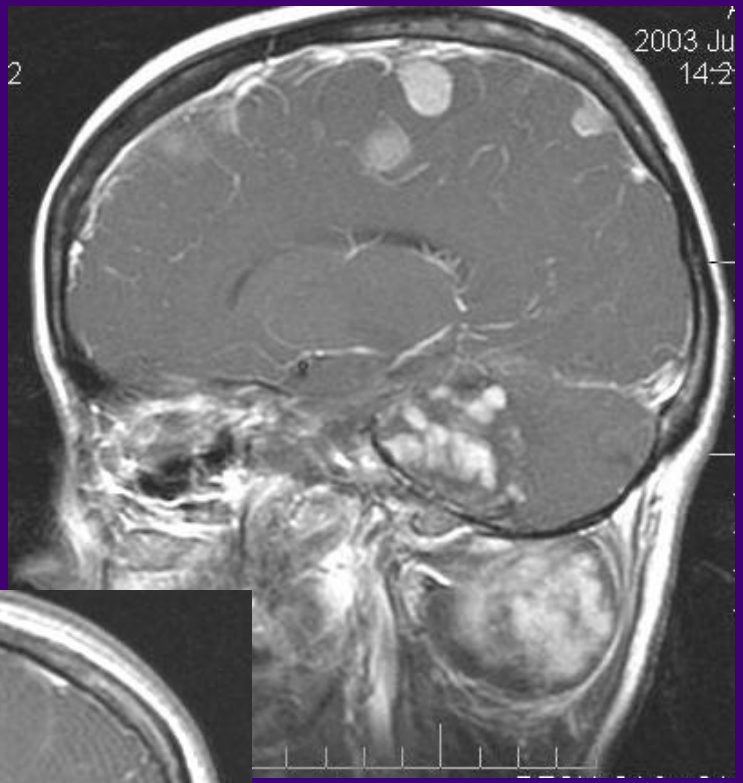
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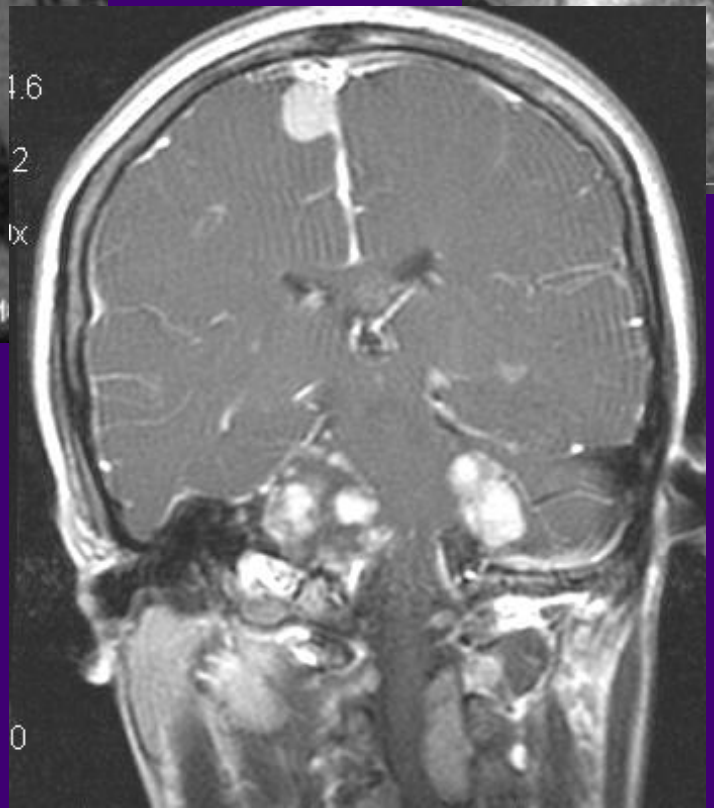


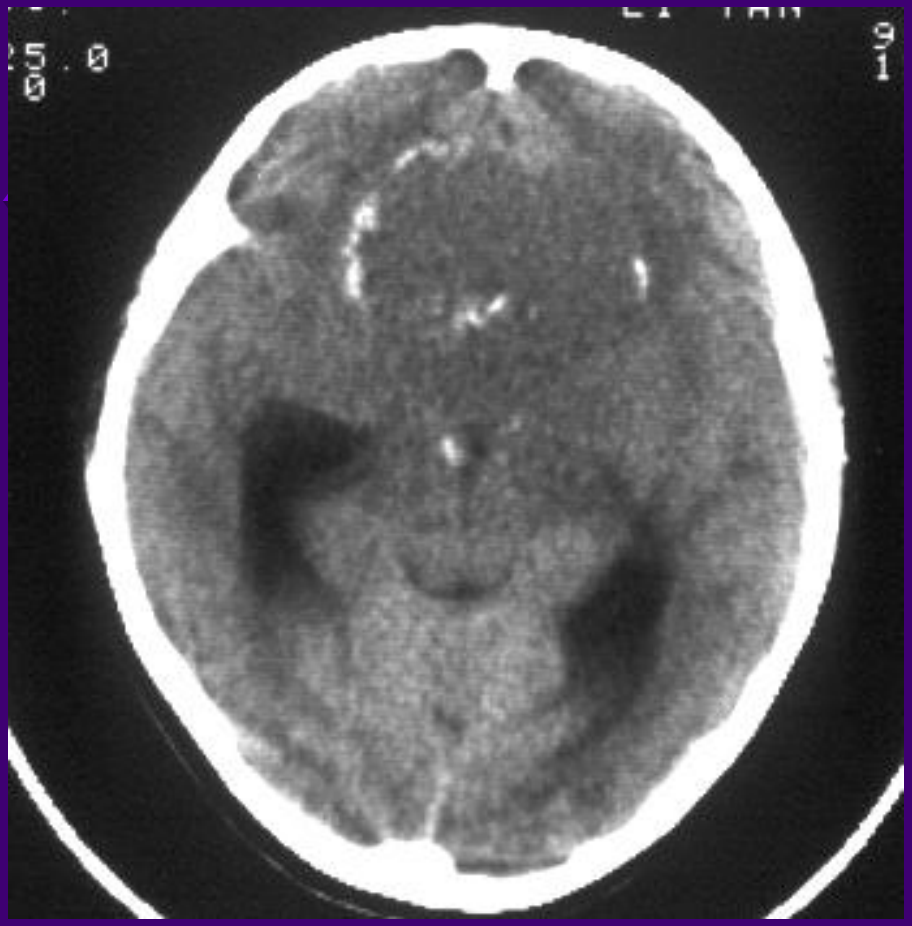
颅咽管瘤

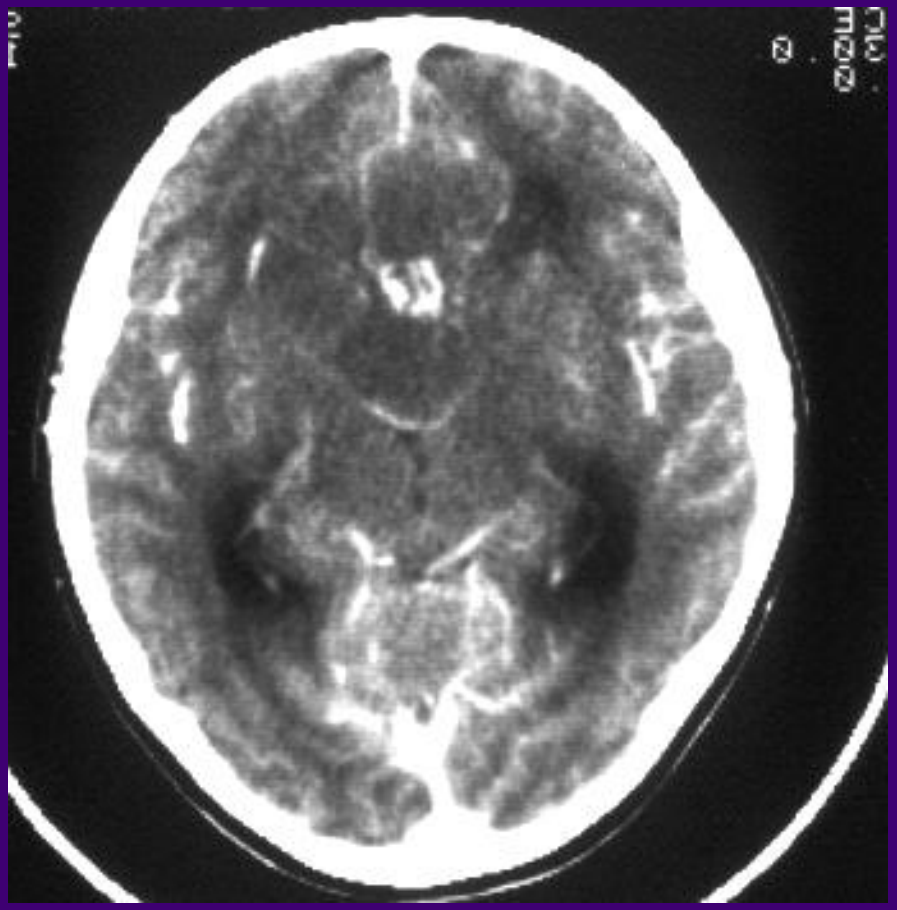
(1)、儿童多见，颅内高压、内分泌改变如早熟等改变；

(2)、多数病灶位于鞍上池内；

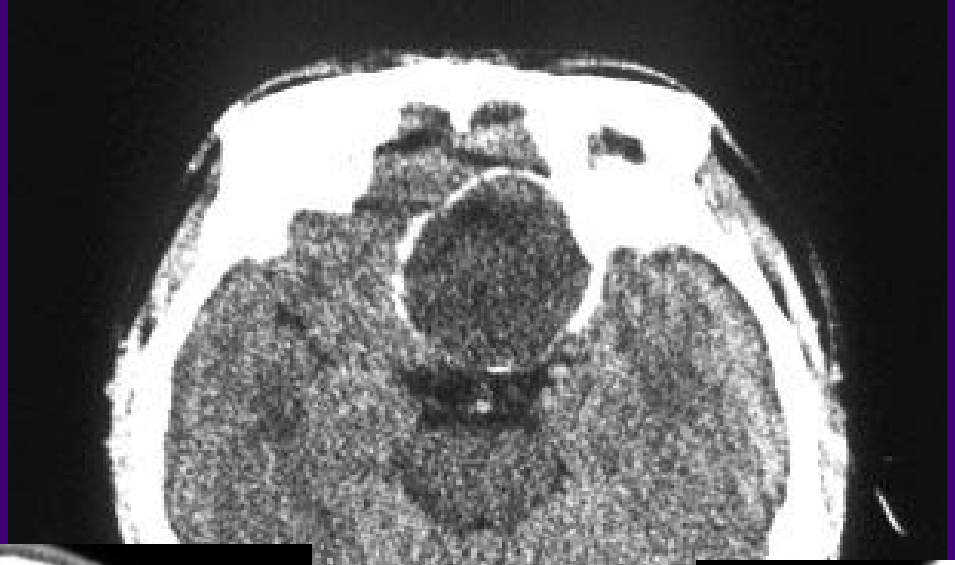
(3)、CT以囊性病灶伴边缘不同形式的钙化为特点：

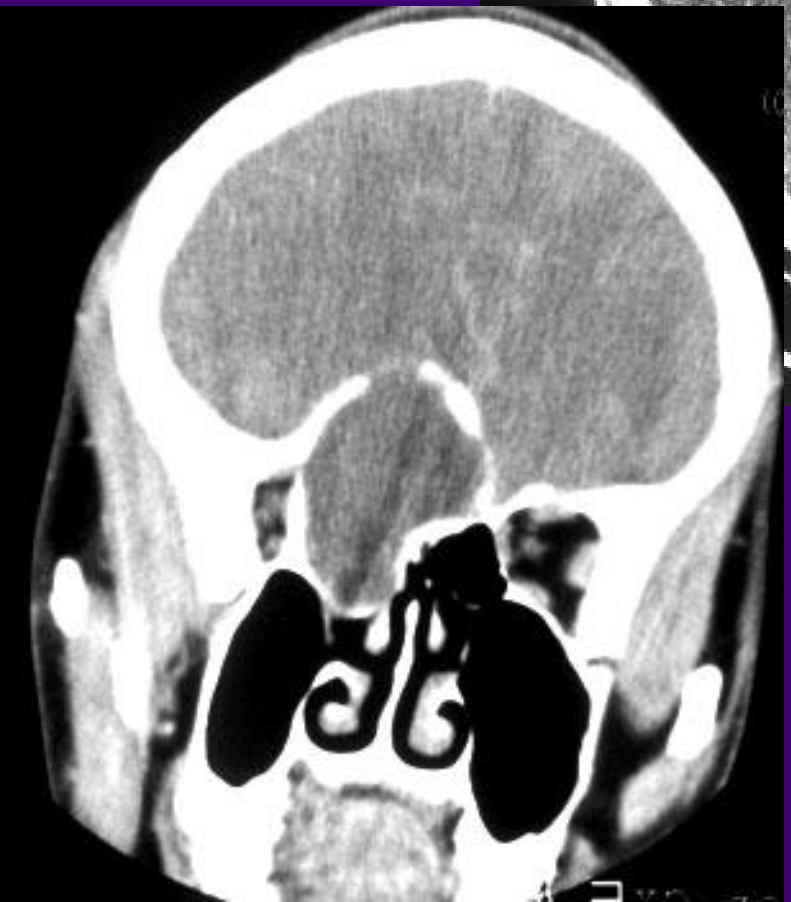
(4)、因CT可显示钙化，故CT在诊断本病时优于MRI。

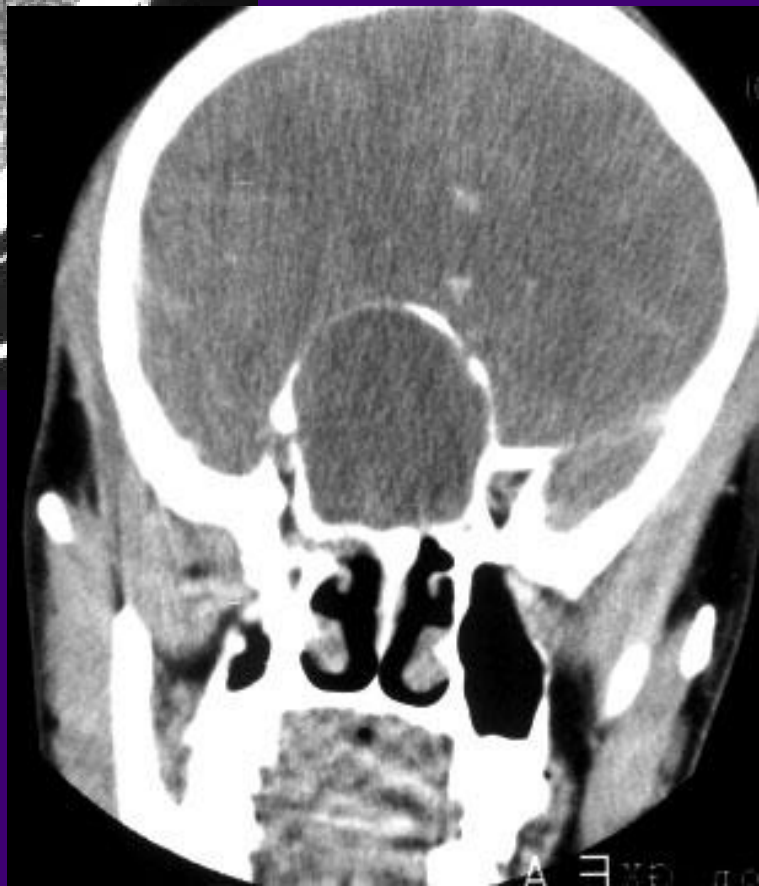


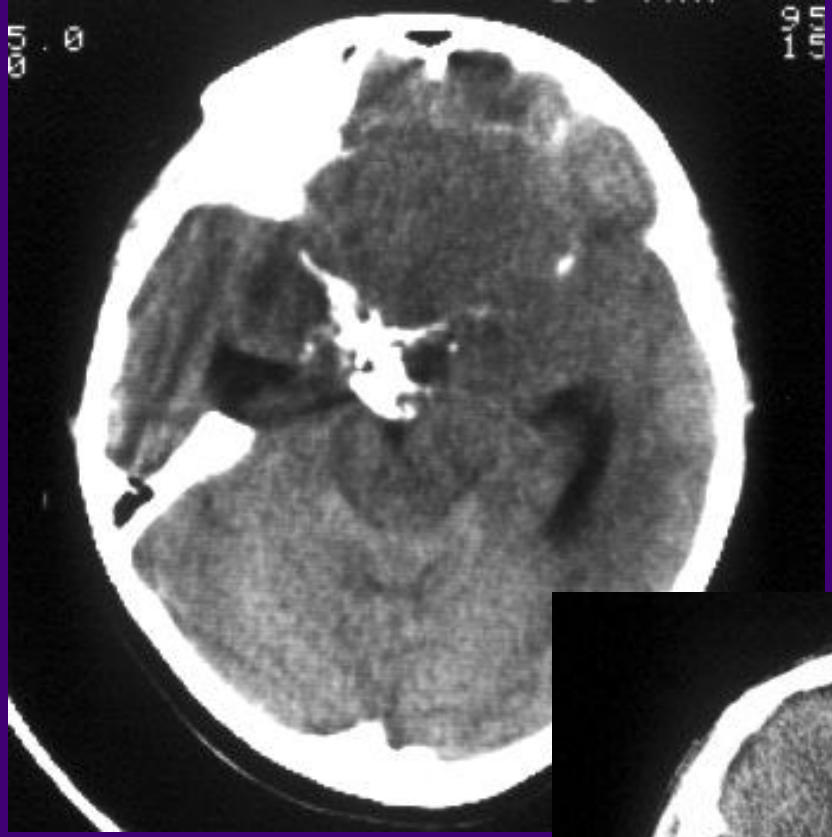


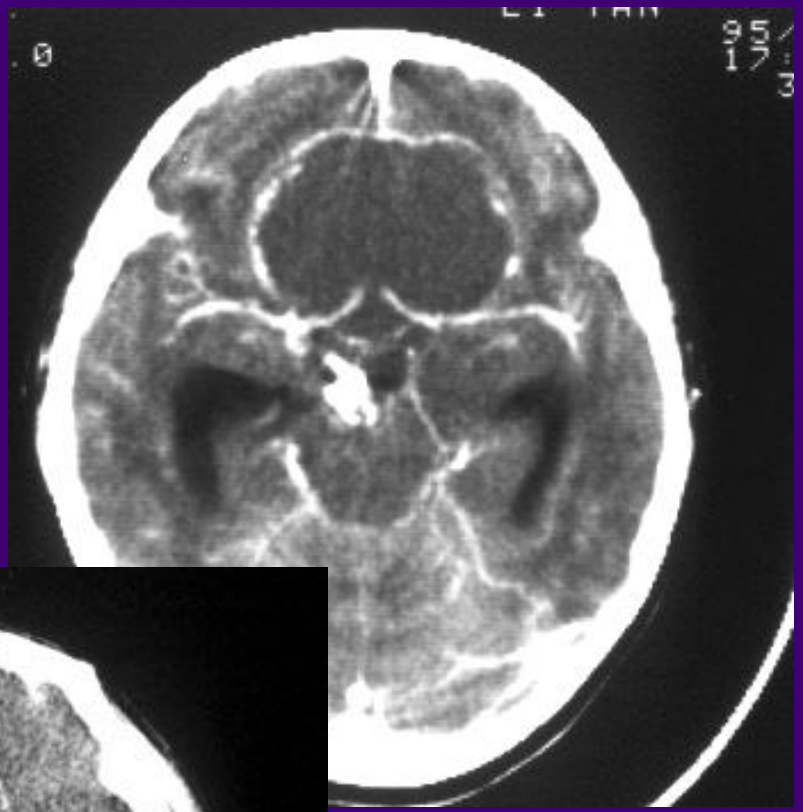
颅咽管瘤CT平扫和增强

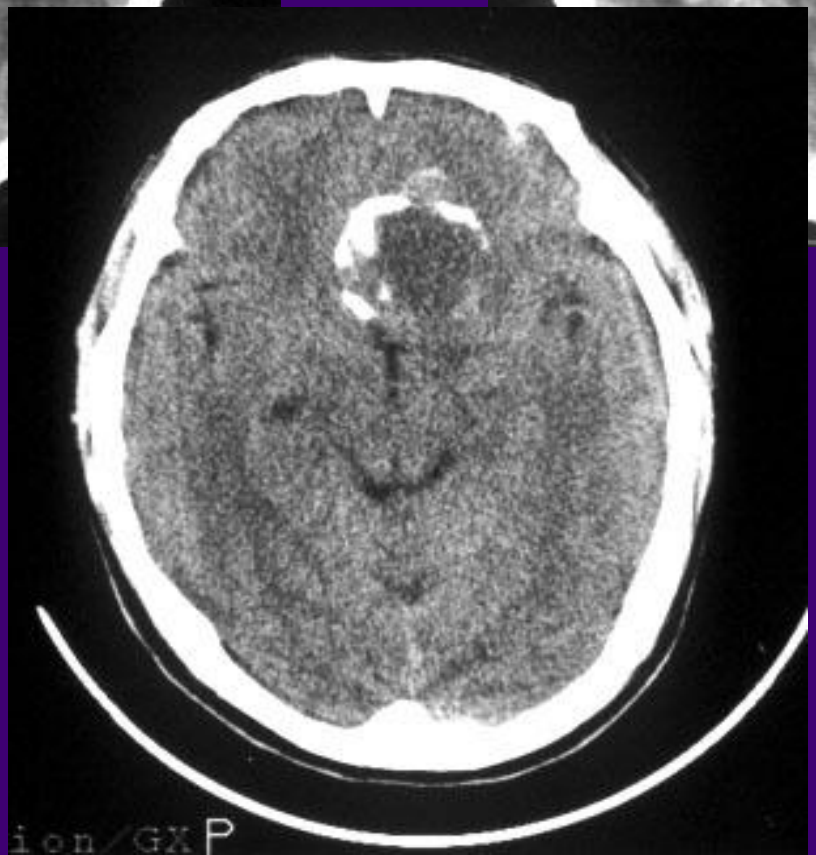


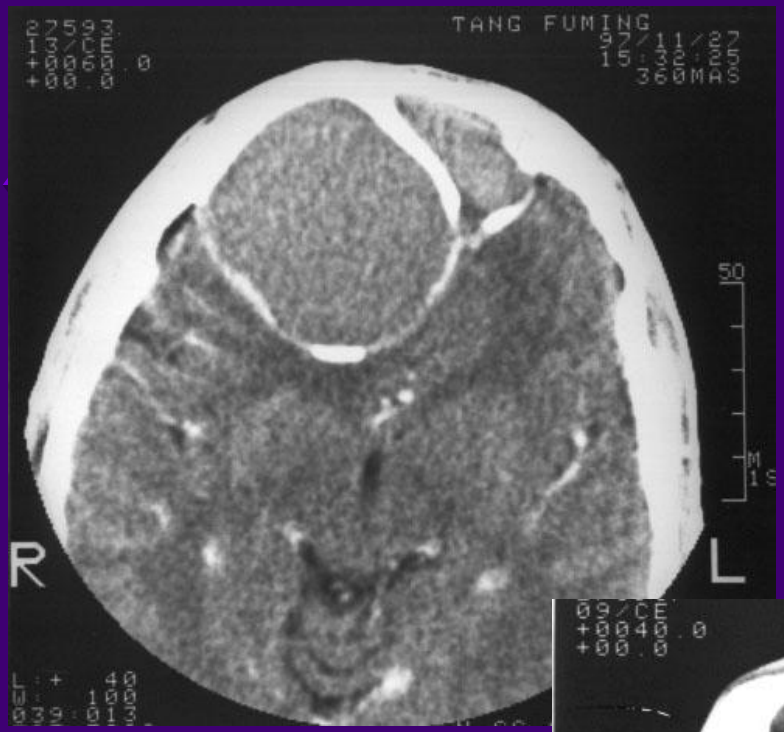








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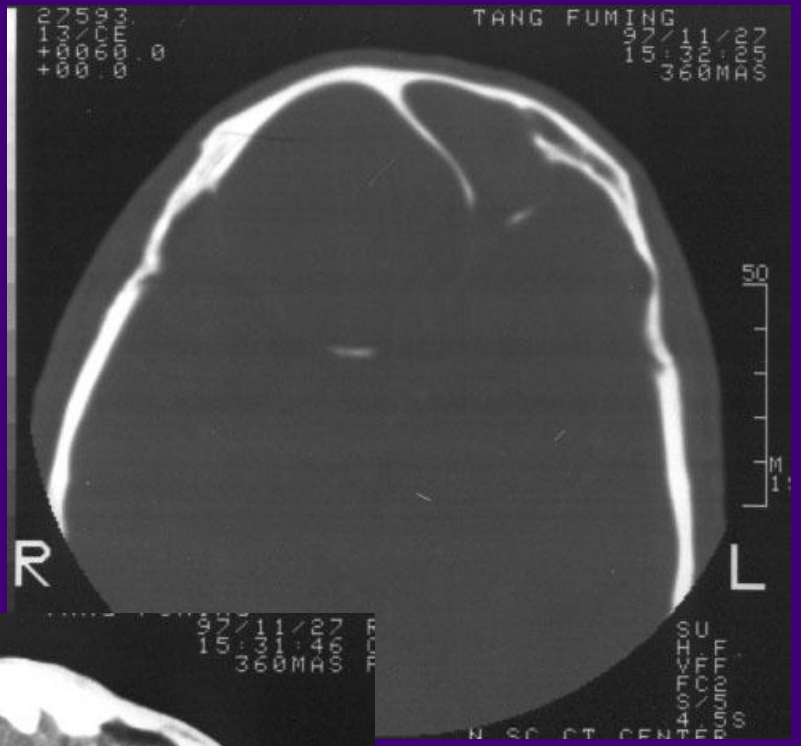
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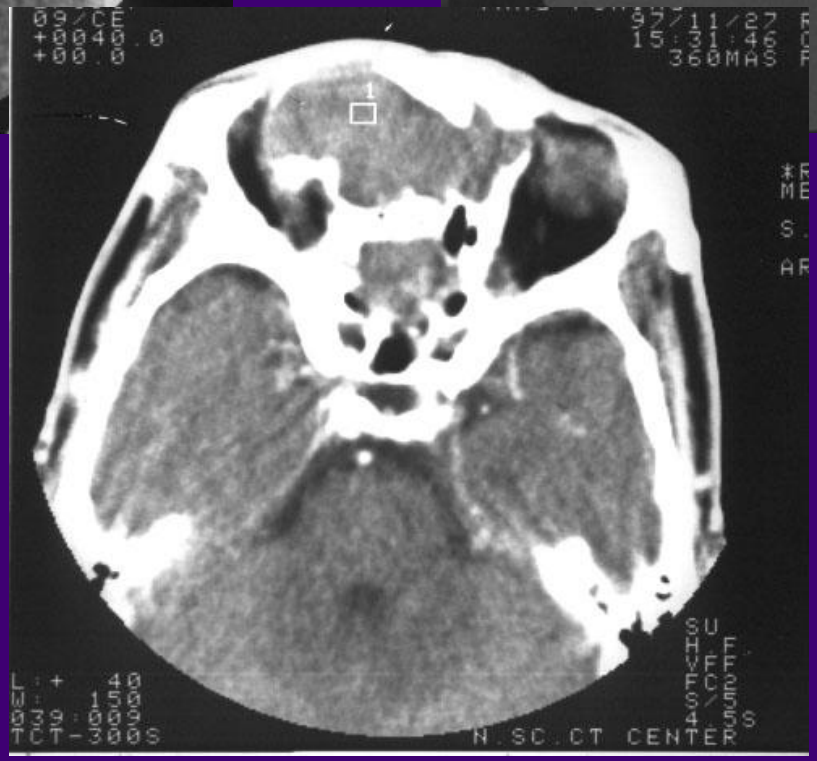
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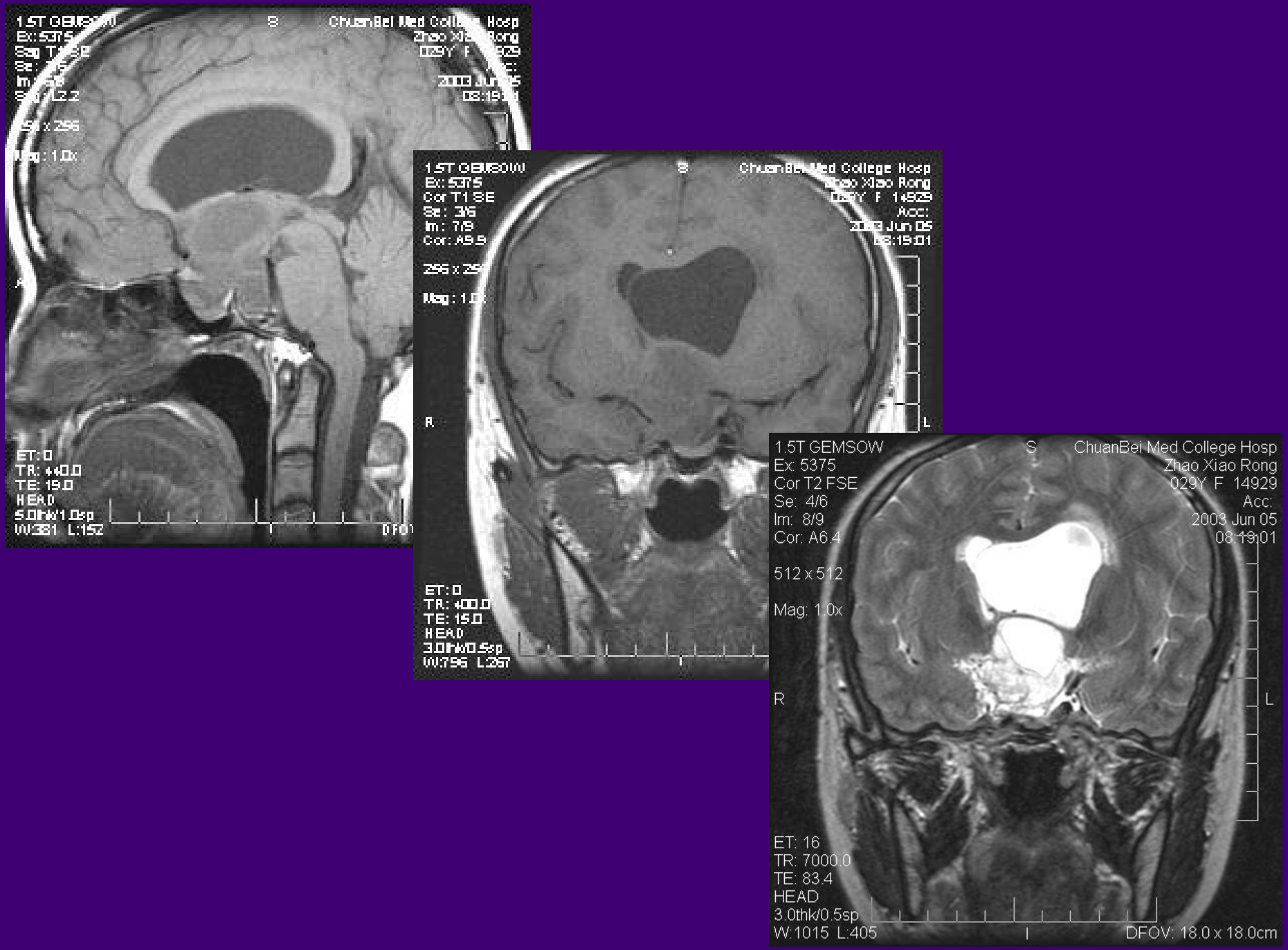
1.5T GEMSOW
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ChuanBei Med College Hosp
Ex: 5375
Cor T1 SE
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Im: 7/9
Cor: A9.9
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HEAD
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ChuanBei Med College Hosp
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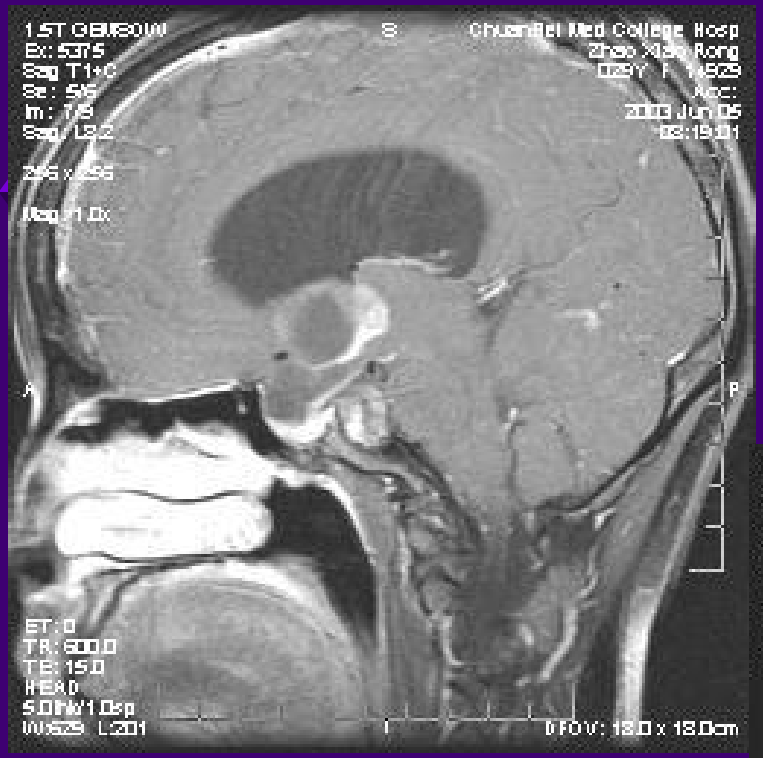
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ChuanBei Med College Hosp
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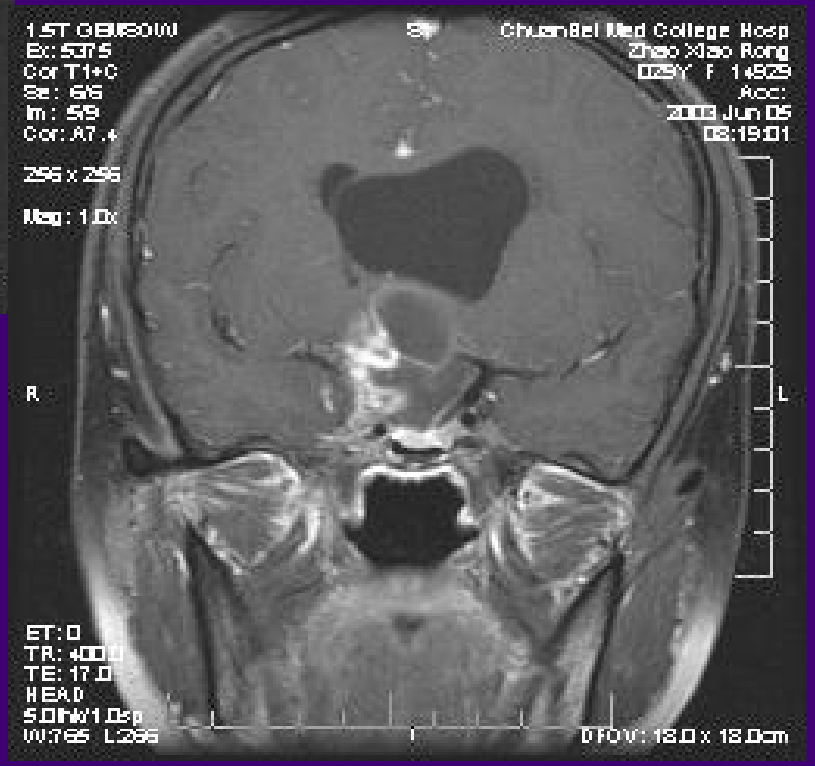
WW:629 WL:201
I
DFOV: 18.0 x 18.0cm


1.5T GEMSOMI
Ex: 5375
Cor T1+C
Se: 6/6
Im: 5/9
Cor: A7.4
256 x 256
Mag: 1.0x
Sp
ChuanBei Med College Hosp
Zhao Xiao Rong
025Y F 14829
Acc:
2003 Jun 05
08:19:01
R
L
ET: 0
TR: 400.0
TE: 17.0
HEAD
5.0mm/1.0sp
WW:765 WL:296
I
DFOV: 18.0 x 18.0cm

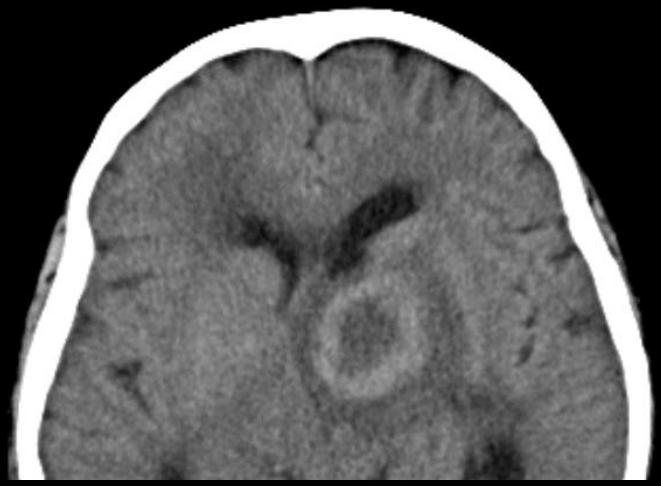
转移瘤

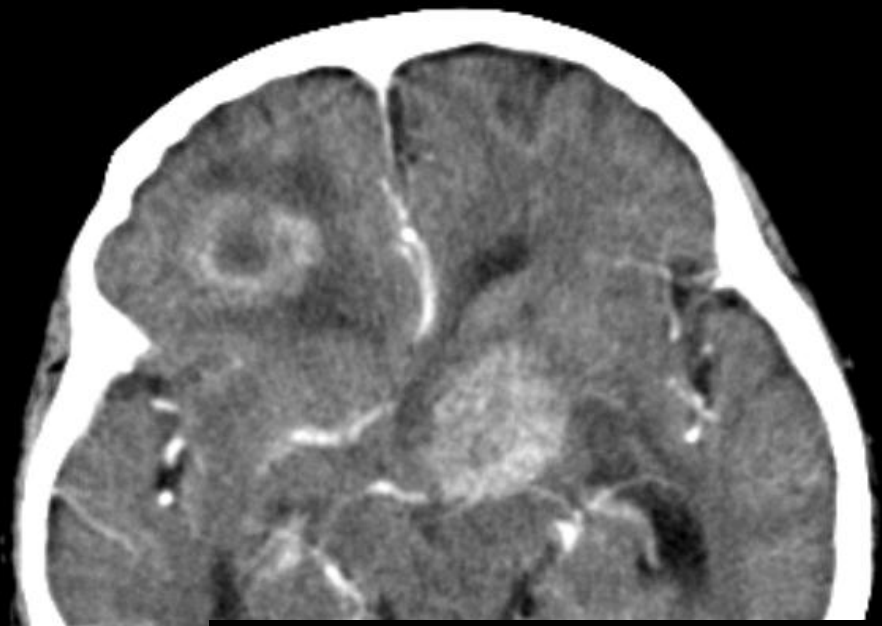
⑴、中老年为主；

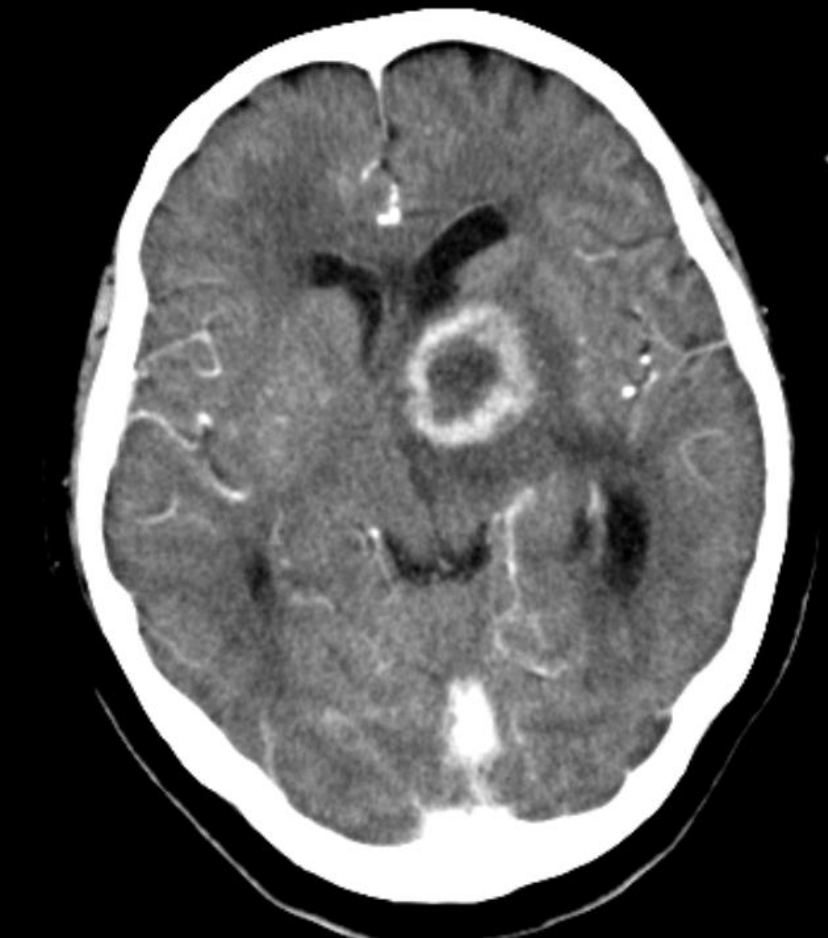
⑵、病变多发，且位置表浅；

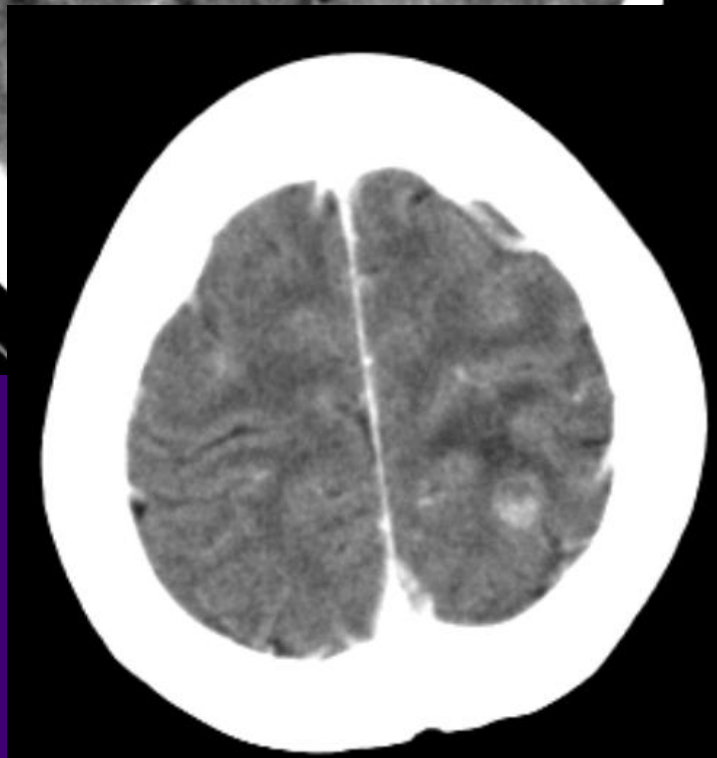
⑶、影像学表现多种多样，如等密度结节、花环，斑片状低密度等；

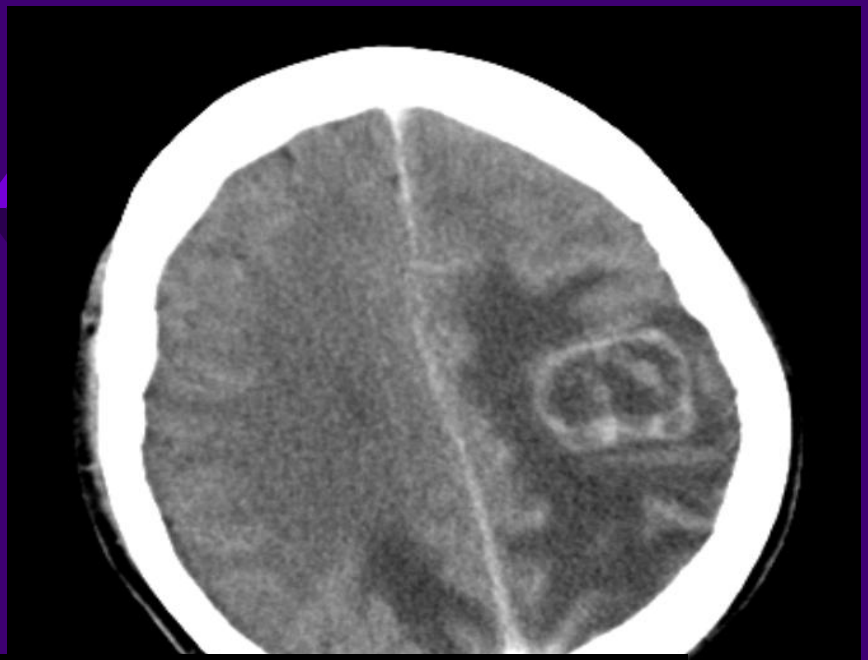
⑷、小结节大水肿是其主要特点。

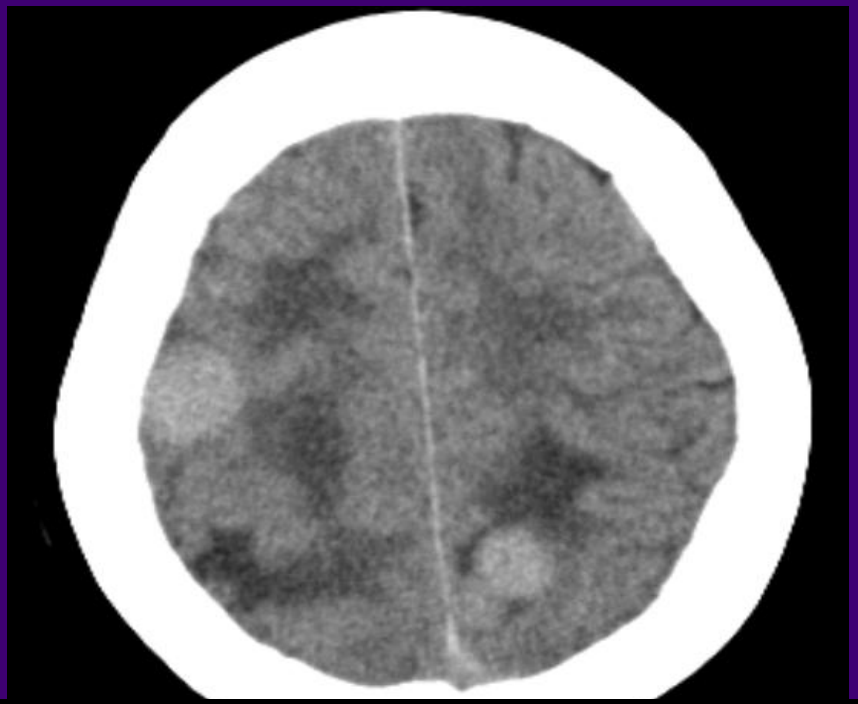


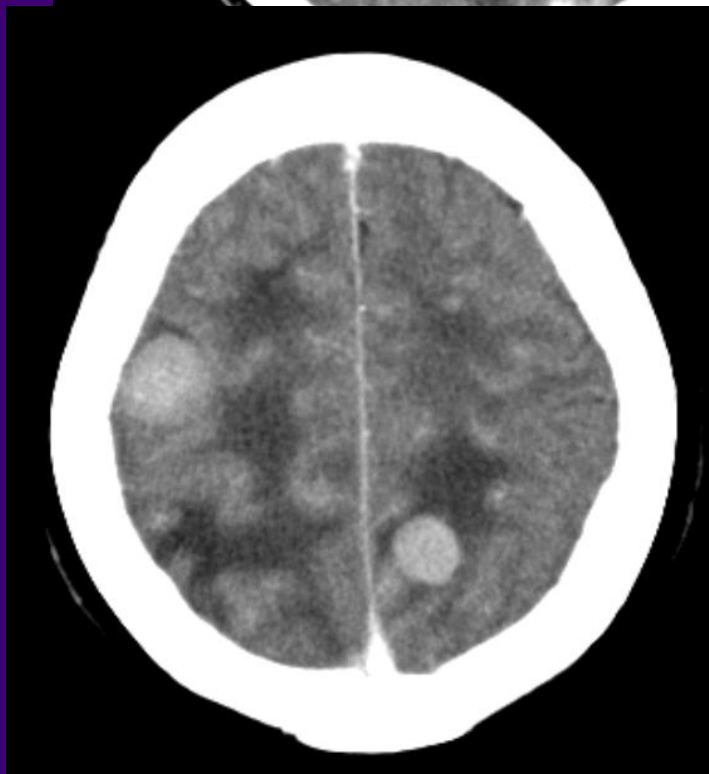


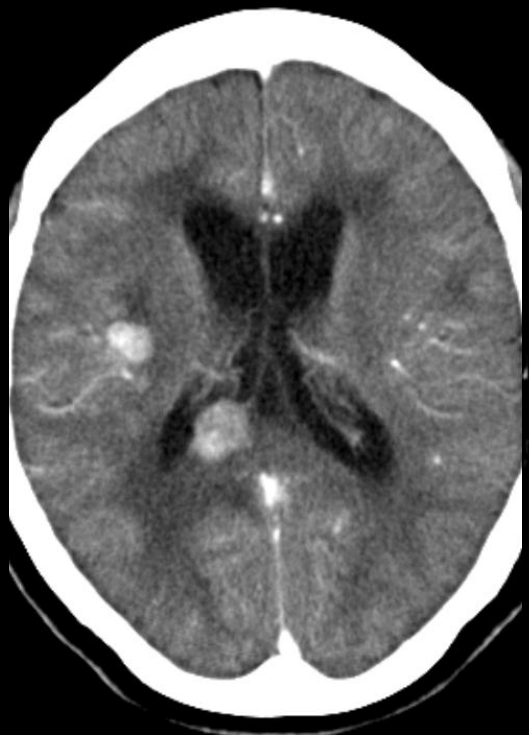


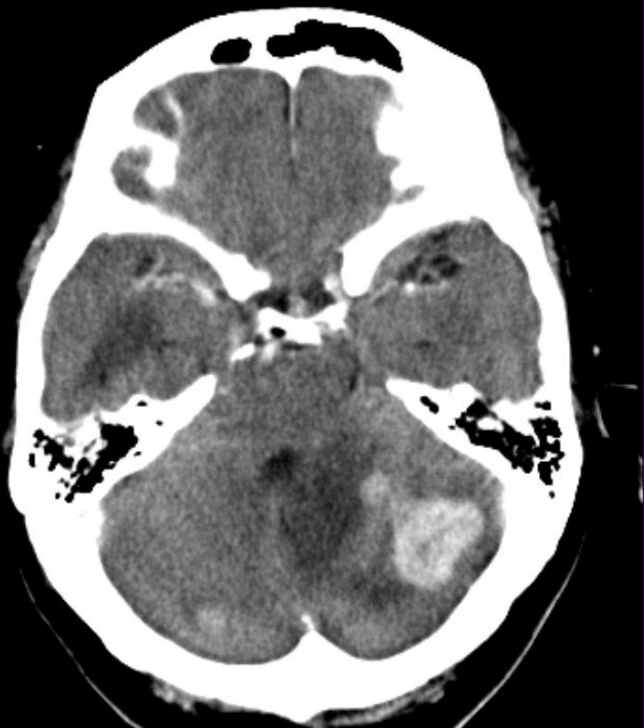


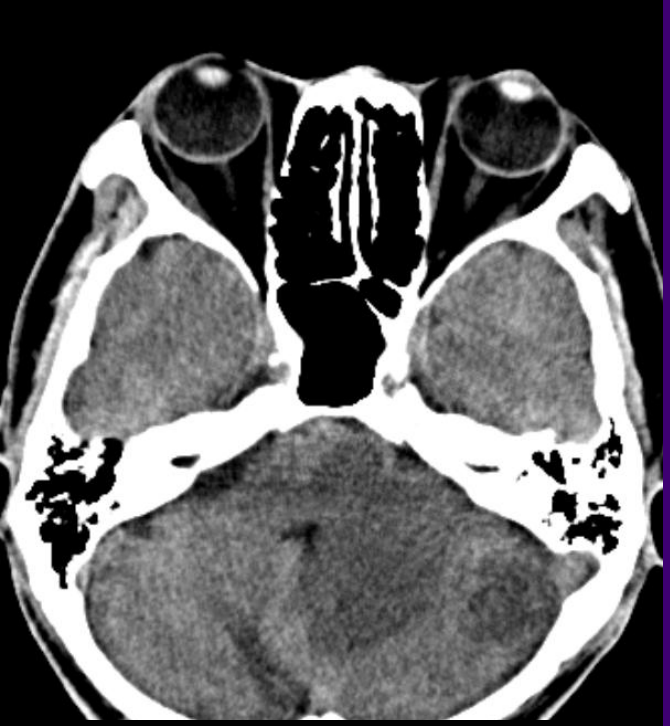


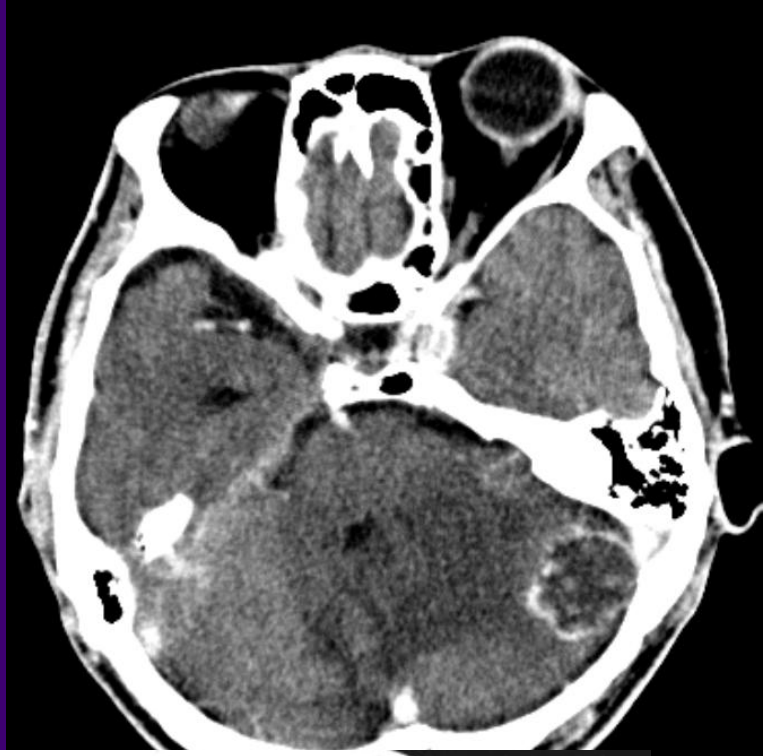


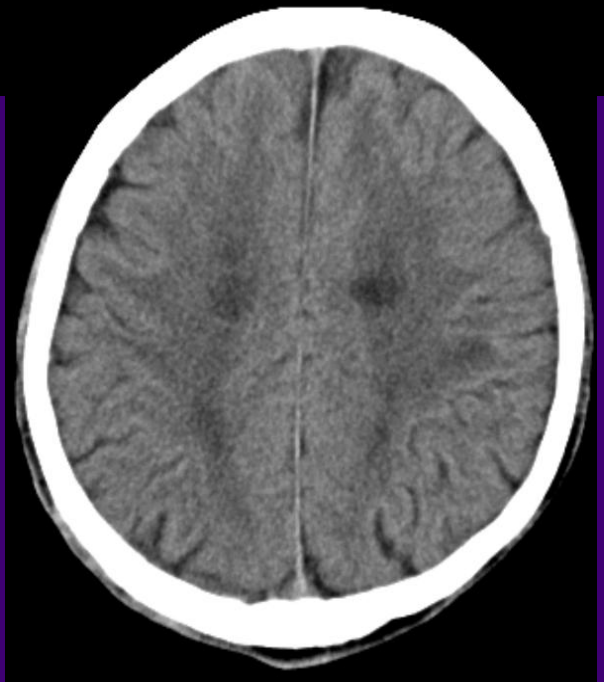


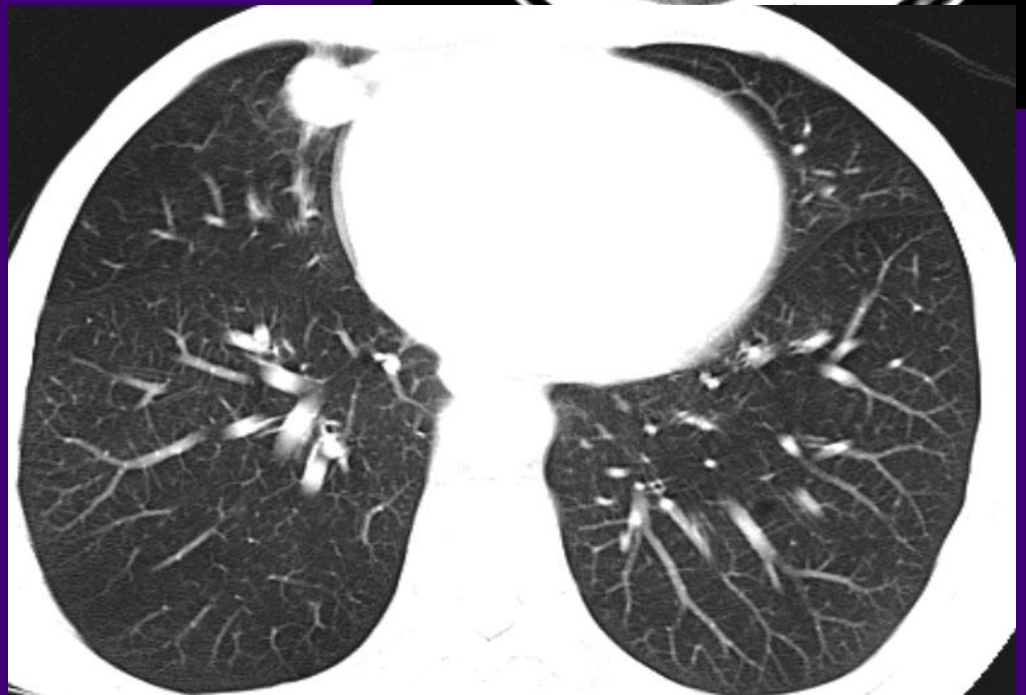


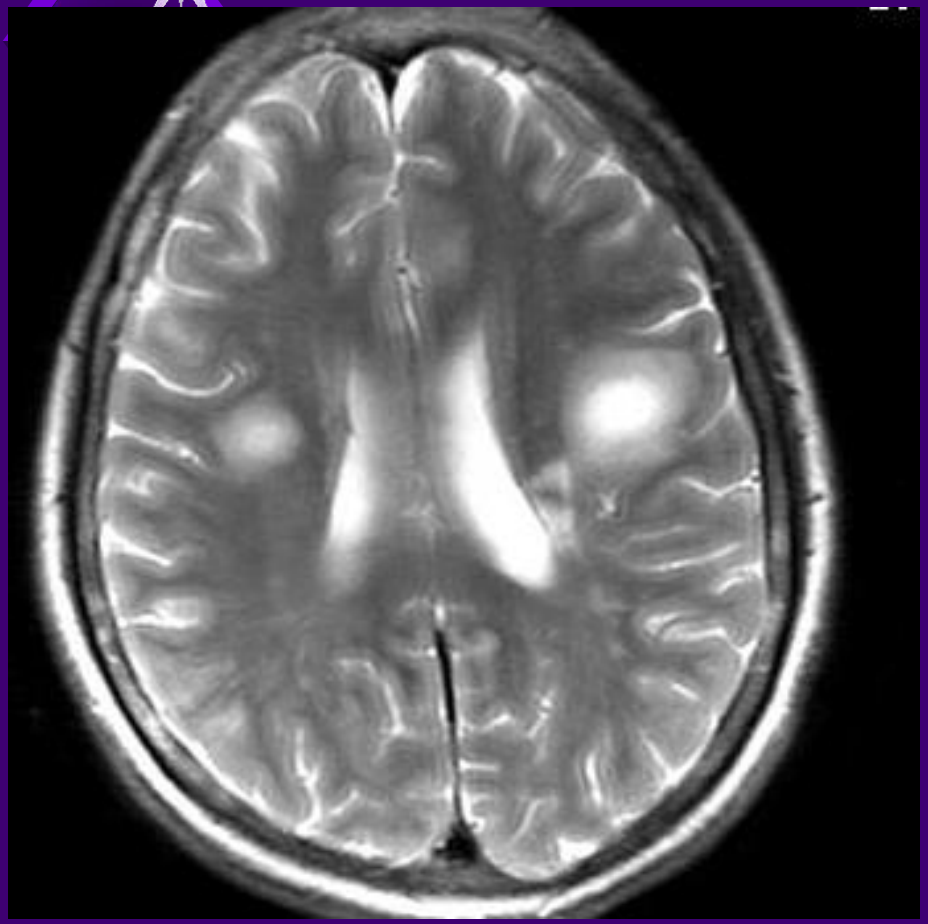


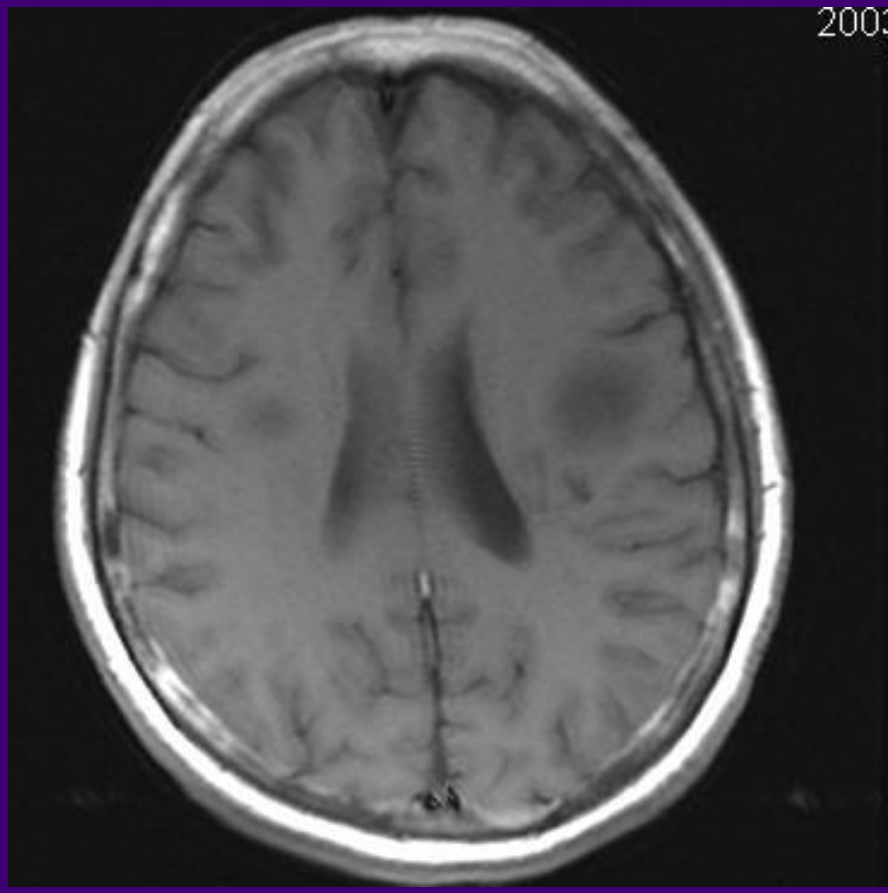








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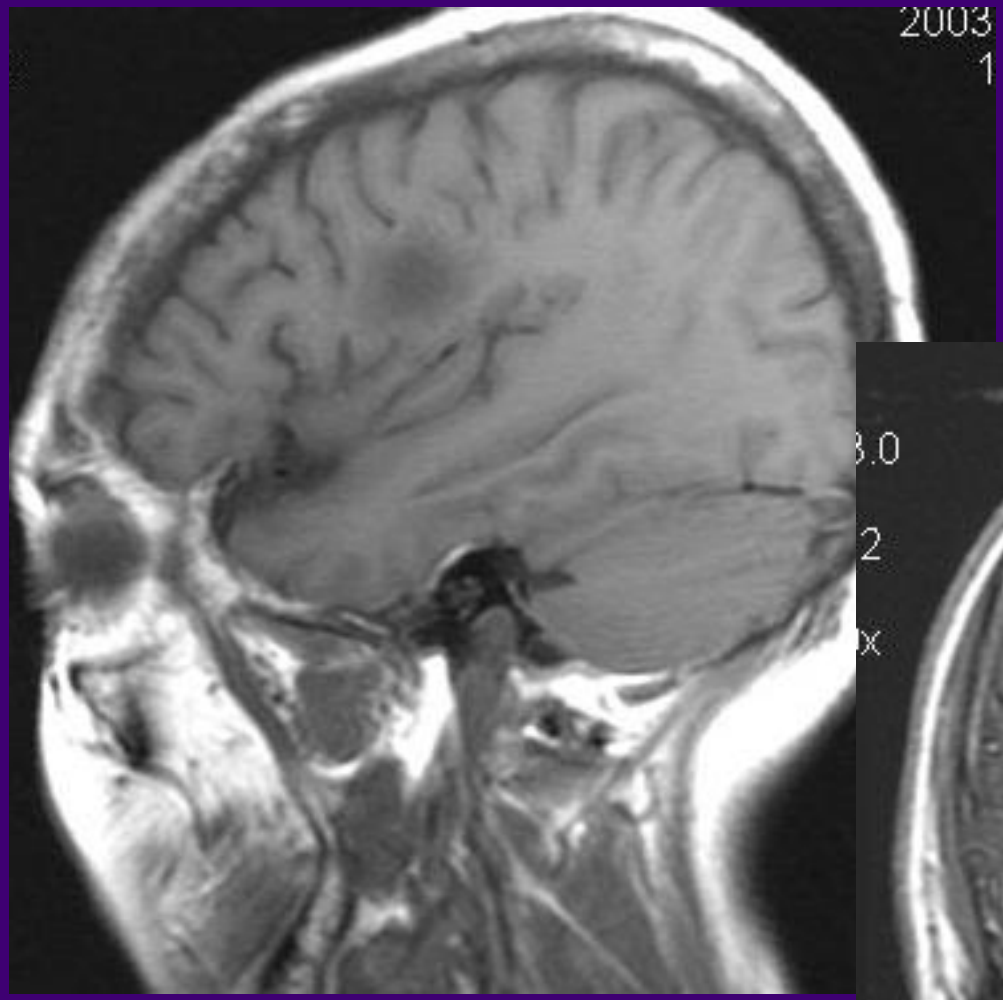
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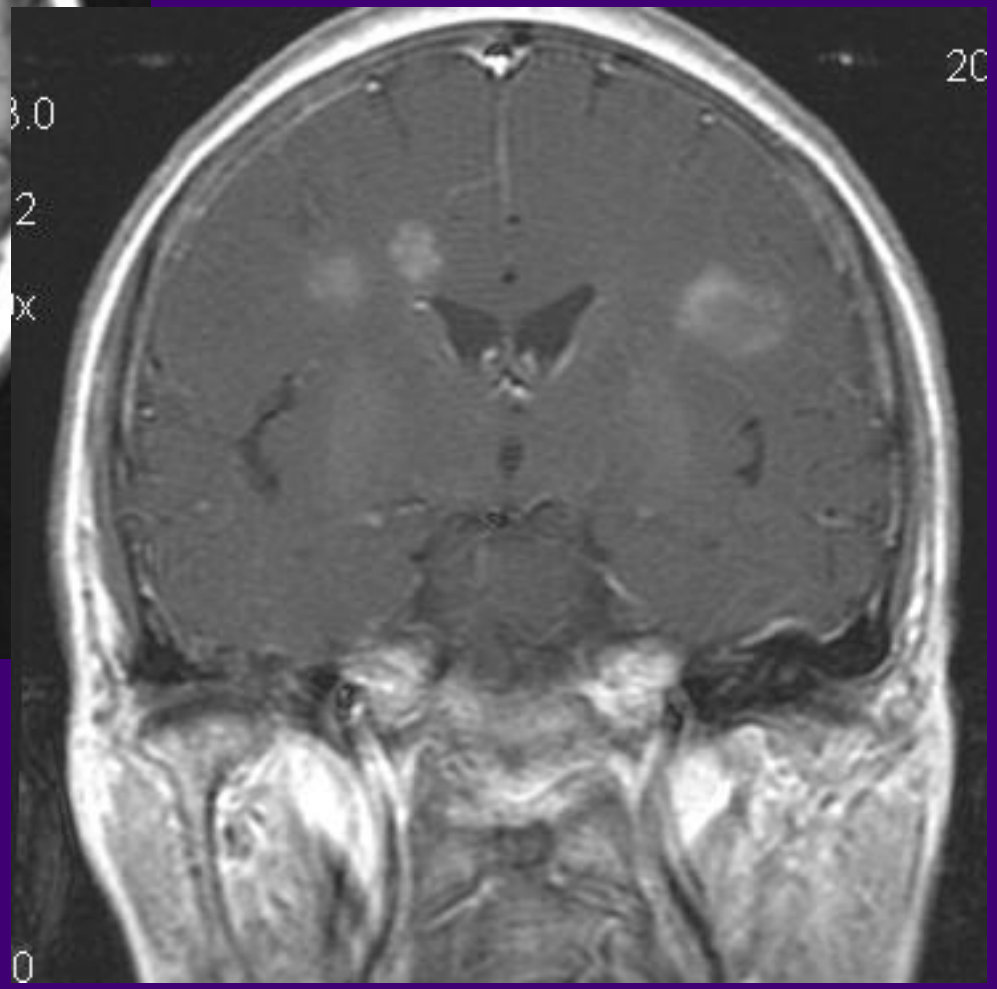
3.0
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x
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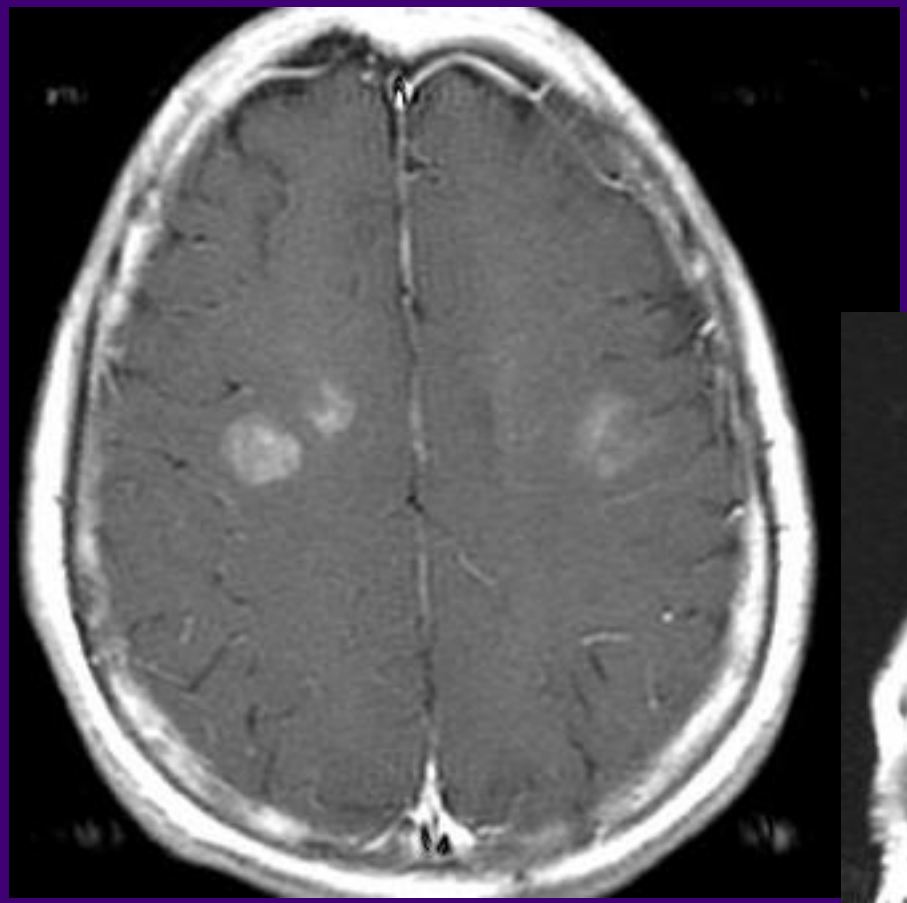

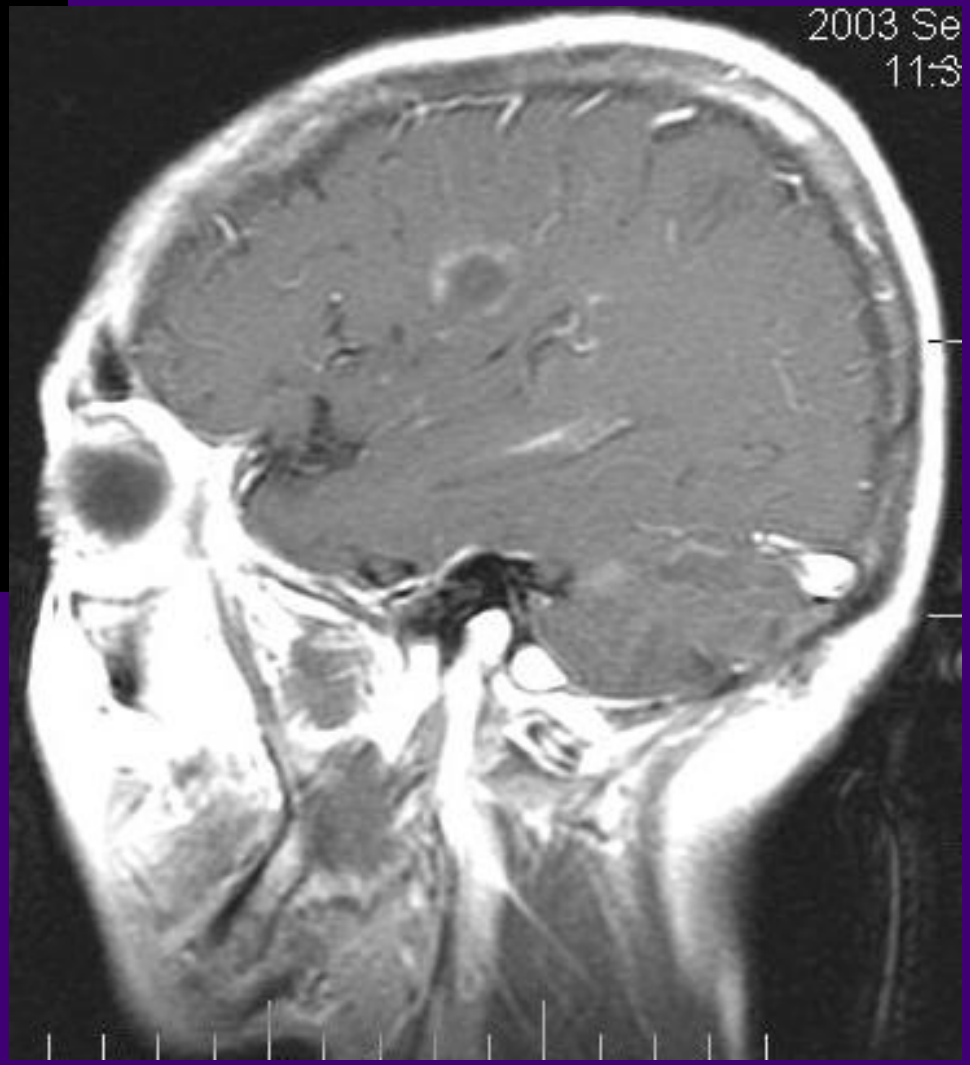
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鉴别诊断要点

1、年龄在鉴别诊断中的价值：

(1)、青少年多以室管膜瘤、髓母细胞瘤、颅咽管瘤及松果体瘤为主；

(2)、中老年多以星形胶质细胞瘤、脑膜瘤、听神经瘤及转移瘤常见；

(3)、脑膜瘤多见于女性，其余肿瘤以男性为主。

2、位置在鉴别诊断中的价值：

- ⑴、小脑半球：儿童以星形胶质细胞瘤常见，成人以转移瘤为主；少见肿瘤有血管母细胞瘤、神经纤维瘤等。
- ⑵、桥小脑角区：以听神经瘤最常见，其次为脑膜瘤、表皮样囊肿。
- ⑶、四脑室及其临近区域：四脑室内以室管膜瘤多见，后方则以髓母细胞瘤为主。

位置在鉴别诊断中的价值

(5)、鞍上池及其临近区域：鞍上池内常见病变为垂体瘤、颅咽管瘤、脑膜瘤、动脉瘤等，鞍旁以脑膜瘤、动脉瘤为主。

(6)、四叠体池区：以松果体瘤、生殖细胞瘤为主。生殖细胞瘤可异位到三脑室前份。

位置在鉴别诊断中的价值

- ⑺、脑实质内：以星形胶质细胞瘤、转移瘤、淋巴瘤为常见。
- ⑻、脑表面：以脑膜瘤为最常见。
- ⑼、侧脑室：主要以室管膜瘤、脑膜瘤及脉络膜乳头状瘤常见。
- ⑽、大脑镰、血窦旁：脑膜瘤为主。

谢谢聆听！