

## ONLINE SUPPLEMENTAL MATERIAL

Variable	Overall	Ruptured aneurysms	Unruptured aneurysms
No. of cases	60	30	30
Age in yrs (mean, [range])	58.3 (12.3)	56.4 (14.7)	60.2 (9.0)
Female sex (no. [%])	44 5 (73.3%)	23 (76.7%)	21(70.0%)
Aneurysm size in mm (mean [range])			
1-3 mm (n)	6	5	1
4-7 mm (n)	18	9	9
8-14 mm (n)	24	10	14
> 15 mm (n)	12	6	6
Selected from pragmatic trial			
ISAT2/CURES trial (n)	47	30	17
STAT trial (n)	4	0	4
FIAT trial (n)	5	0	5
RISE trial (n)	4	0	4

**Supplemental Table 1:** Characteristics of patients and aneurysms included in the portfolio and in the ruptured and unruptured aneurysm subgroups.

	All cases	Ruptured aneurysms	
		Yes	No
No. of patients	60	30	30
All raters (n = 47)	0.092 (0.047 - 0.146)	0.057 (-0.001 - 0.122)	0.133 (0.067 - 0.189)
Experience (yrs)			
0-5 (n = 18)	0.183 (0.069 - 0.312)	0.208 (0.003 - 0.395)	0.153 (0.083 - 0.243)
6-10 (n = 16)	0.065 (0.025 - 0.109)	-0.010 (-0.042 - 0.037)	0.158 (0.098 - 0.233)
11-20 (n = 6)	0.114 (-0.034 - 0.342)	-0.011 (-0.053 - 0.086)	0.267 (-0.034 - 0.519)
> 20 (n = 7)	-0.040 (-0.078 - 0.004)	-0.053 (-0.096 - 0.007)	-0.028 (-0.094 - 0.054)
Specialty			
Open Neurosurgeons (n= 15)	0.095 (0.047 - 0.161)	0.116 (0.033 - 0.217)	0.073 (0.035 - 0.129)
INR (n = 25)	0.101 (0.043 - 0.169)	0.057 (-0.011 - 0.144)	0.144 (0.071 - 0.223)
Dual-trained Neurosurgeons (n = 7)	0.070 (-0.022 - 0.225)	-0.010 (-0.039 - 0.060)	0.143 (-0.026 - 0.328)
Practice location			
Europe (n = 27)	0.114 (0.052 - 0.190)	0.066 (-0.009 - 0.171)	0.166 (0.084 - 0.248)
North America (n = 19)	0.078 (0.036 - 0.124)	0.055 (-0.003 - 0.102)	0.101 (0.034 - 0.164)

**Supplemental Table 2:** Interrater agreement on: whether surgical management is an option for this case.

	All cases	Ruptured aneurysms	
		Yes	No
No. of patients	60	30	30
All raters (n = 47)	0.056 (0.039 - 0.077)	0.038 (0.016 - 0.065)	0.074 (0.050 - 0.101)
Experience (yrs)			
0-5 (n = 18)	0.101 (0.069 - 0.146)	0.047 (0.016 - 0.090)	0.149 (0.099 - 0.210)
6-10 (n = 16)	0.034 (0.011 - 0.067)	0.008 (-0.017 - 0.058)	0.058 (0.021 - 0.103)
11-20 (n = 6)	0.142 (0.062 - 0.229)	0.104 (-0.012 - 0.229)	0.187 (0.040 - 0.320)
> 20 (n = 7)	-0.137 (-0.150 - - 0.119)	-0.131 (-0.148 - - 0.099)	-0.143 (-0.161 - - 0.118)
Specialty			
Open Neurosurgeons (n = 15)	0.017 (-0.006 - 0.049)	-0.003 (-0.028 - 0.043)	0.032 (0.003 - 0.071)
INR (n = 25)	0.087 (0.062 - 0.120)	0.075 (0.041 - 0.111)	0.098 (0.053 - 0.145)
Dual-trained Neurosurgeons (n = 7)	0.069 (0.017 - 0.129)	0.047 (-0.012 - 0.139)	0.083 (0.018 - 0.159)
Practice location			
Europe (n = 27)	0.087 (0.063 - 0.120)	0.058 (0.023 - 0.105)	0.116 (0.081 - 0.164)
North America (n = 19)	-0.014 (-0.029 - 0.003)	-0.014 (-0.035 - 0.013)	-0.014 (-0.031 - 0.006)

**Supplemental Table 3:** Interrater agreement on: whether endovascular treatment is an option for this case.

	All cases	P value	Unruptured aneurysms	P value	Ruptured aneurysms	P value
All responders	58% (±28%)		58% (±30%)		58% (±29%)	
Training background		< .001		< .001		< .001
Open Neurosurgeons	30% (±21%)		25% (±16%)		35% (±27%)	
Dual-trained Neurosurgeons	46% (±25%)		49% (±28%)		43% (±24%)	
INR	77% (±17%)		78% (±17%)		75% (±19%)	
Experience		.32		.32		.37
0-5 years	59% (±27%)		59% (±30%)		59% (±26%)	
6-10 years	56% (±28%)		55% (±29%)		57% (±30%)	
11-20 years	42% (±24%)		42% (±23%)		41% (±27%)	
>20 years	71% (±34%)		73% (±35%)		70% (±33%)	
Practice location		.49		.79		.26
North America	52% (±31%)		54% (±33%)		50% (±31%)	
Europe	62% (±27%)		60% (±28%)		64% (±27%)	

**Supplemental Table 4:** Vote proportions for endovascular treatment (mean, standard deviation).

INR : interventional neuroradiologist

	Final management Dichotomized Surgery: All others	Final management All categories	Percent agreement
Rater 1	0.022 (-0.268 - 0.312)	0.397 (0.224 - 0.572)	89%
Rater 2	0.573 (0.377 - 0.770)	0.533 (0.375 - 0.716)	78%
Rater 3	0.356 (0.110 - 0.602)	0.165 (-0.014 - 0.370)	71%
Rater 4	0.424 (0.180 - 0.668)	0.100 (-0.003 - 0.212)	76%
Rater 5	0.078 (-0.247 - 0.403)	0.377 (0.213 - 0.559)	87%
Rater 6	0.424 (0.095 - 0.754)	0.511 (0.340 - 0.672)	87%
Rater 7	<b>0.697 (0.515 - 0.878)</b>	0.596 (0.418 - 0.749)	85%
Rater 8	0.274 (0.016 - 0.531)	0.279 (0.057 - 0.522)	72%
Rater 9	0.597 (0.369 - 0.825)	<b>0.660 (0.504 - 0.802)</b>	86%
Rater 10	0.210 (-0.034 - 0.453)	0.112 (-0.033 - 0.299)	63%
Rater 11	0.509 (0.255 - 0.763)	0.521 (0.340 - 0.687)	83%
Rater 12	0.280 (0.080 - 0.479)	0.351 (0.197 - 0.525)	64%
Rater 13	0.556 (0.312 - 0.799)	0.462 (0.312 - 0.631)	83%
Rater 14	<b>0.663 (0.480 - 0.847)</b>	0.463 (0.295 - 0.626)	83%
Rater 15	0.294 (-0.200 - 0.788)	<b>0.769 (0.584 - 0.907)</b>	93%
Rater 16	0.355 (0.072 - 0.639)	0.370 (0.232 - 0.517)	80%
Rater 17	0.525 (0.251 - 0.799)	0.412 (0.238 - 0.574)	86%

	Final management Dichotomized Surgery: All others	Final management All categories	Percent agreement
Rater 18	0.115 (-0.093 - 0.324)	0.318 (0.158 - 0.463)	80%
Rater 19	0.104 (-0.292 - 0.501)	0.143 (-0.020 - 0.412)	91%
Rater 20	<b>0.900 (0.707 - 1.000)</b>	<b>0.667 (0.508 - 0.818)</b>	98%
Rater 21	0.519 (0.290 - 0.747)	0.332 (0.148 - 0.516)	78%
Rater 22	<b>0.676 (0.465 - 0.886)</b>	0.541 (0.335 - 0.756)	88%
Rater 23	<i>0.060 (-0.239 - 0.359)</i>	0.180 (0.037 - 0.355)	83%
Rater 24	<i>0.374 (0.127 - 0.621)</i>	0.467 (0.303 - 0.653)	80%
Rater 25	ITE	ITE	100%
Rater 26	<b>0.804 (0.620 - 0.988)</b>	<b>0.819 (0.695 - 0.925)</b>	93%
Rater 27	ITE	<i>0.659 (0.036 - 1.000)</i>	97%
Rater 28	<i>0.483 (0.195 - 0.770)</i>	0.318 (0.084 - 0.549)	85%
Rater 29	<i>0.464 (0.020 - 0.909)</i>	<b>0.735 (-0.040 - 1.000)</b>	93%
Rater 30	0.343 (0.121 - 0.566)	0.338 (0.164 - 0.540)	71%
Rater 31	0.077 (-0.165 - 0.320)	0.395 (0.240 - 0.555)	61%
Rater 32	<b>0.841 (0.700 - 0.982)</b>	<b>0.839 (0.692 - 0.946)</b>	96%
Rater 33	0.558 (0.347 - 0.769)	0.436 (0.282 - 0.589)	78%
Rater 34	<b>0.680 (0.488 - 0.872)</b>	0.462 (0.301 - 0.643)	85%

	Final management Dichotomized Surgery: All others	Final management All categories	Percent agreement
Rater 35	<i>0.381 (0.108 - 0.654)</i>	0.333 (0.179 - 0.532)	78%

**Supplemental Table 5:** Intra-rater agreement regarding: Best final management choice.  
Substantial values ( $\kappa > 0.6$ ) are **bolded**. Paradoxical kappa values (i.e: high agreement but low kappa with confidence interval greater than 0.5) in *italics*.  
ITE: Impossible to estimate (all votes for one modality).

	All cases				UA				RA			
Endovascular devices	BAC	SAC	FD	ISFD	BAC	SAC	FD	ISFD	BAC	SAC	FD	ISFD
All responders	35%	10%	7%	8%	25%	15%	9%	12%	46%	6%	5%	4%
Training background												
Neurosurgeons	21%	6%	3%	1%	17%	7%	3%	1%	25%	5%	4%	1%
Dual-trained	25%	11%	4%	7%	14%	20%	5%	10%	35%	1%	3%	4%
INR	47%	12%	10%	12%	32%	18%	13%	18%	61%	6%	6%	6%
Years of experience												
0-5 y of experience	33%	10%	7%	11%	25%	14%	7%	16%	42%	7%	8%	6%
6-10 y of experience	34%	14%	5%	4%	21%	23%	5%	6%	46%	6%	4%	2%
11-20 y of experience	28%	5%	4%	5%	22%	9%	5%	7%	35%	1%	3%	2%
>20 y of experience	49%	3%	13%	12%	33%	6%	23%	17%	65%	0%	2%	6%
Practice location												
North America	30%	10%	10%	6%	21%	15%	13%	9%	39%	5%	7%	3%
Europe	39%	10%	5%	9%	27%	15%	5%	14%	51%	5%	4%	5%
Experience with FD												
0 case	24%	7%	5%	7%	18%	9%	4%	9%	31%	5%	6%	4%
1+ case(s)	41%	12%	8%	8%	28%	18%	11%	13%	53%	5%	4%	4%
Experience with ISFD												
0 case	28%	10%	6%	4%	20%	15%	6%	5%	36%	5%	6%	2%
1+ case(s)	45%	10%	8%	14%	31%	15%	13%	21%	60%	4%	4%	8%

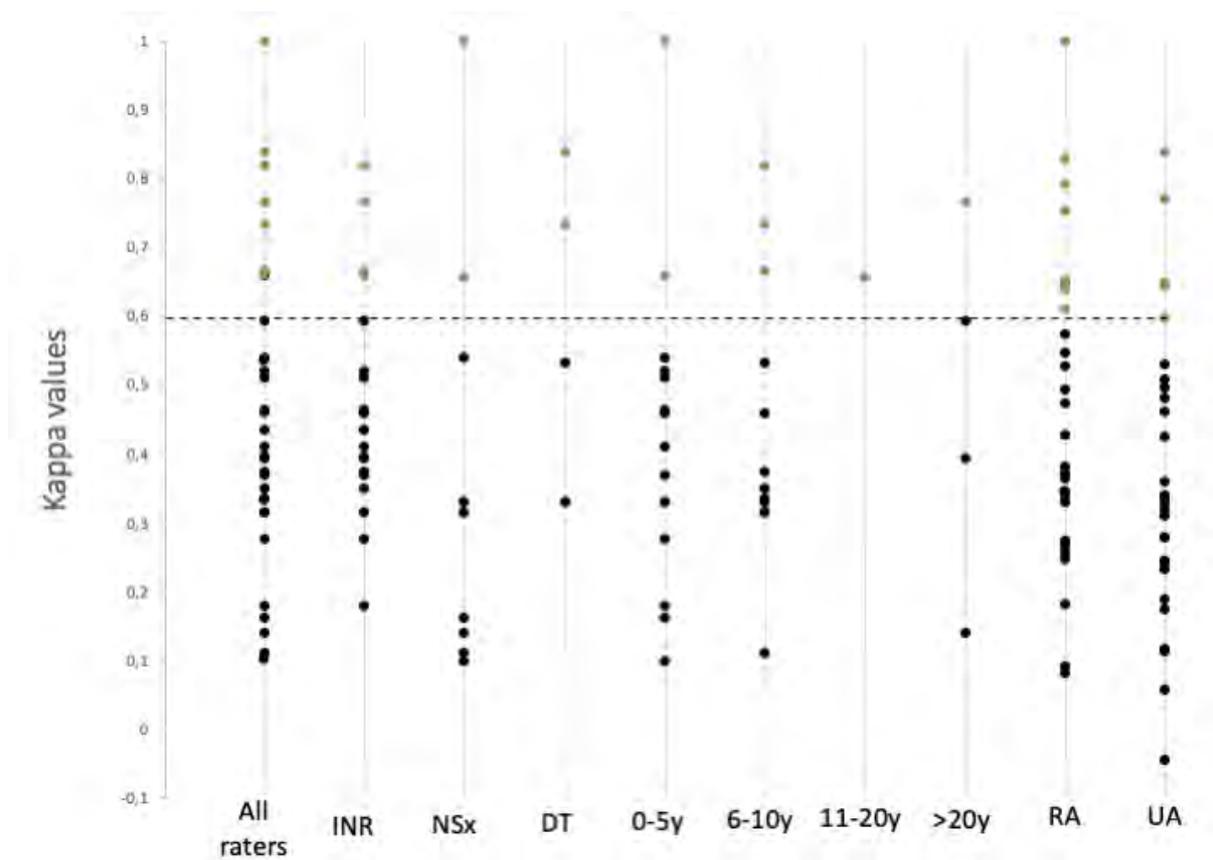
**Supplemental Table 6:** Mean proportion of votes for each endovascular method.

BAC: Balloon assisted coiling; FD: flow diverter; INR: interventional neuroradiologist; ISFD: intra-saccular flow-disruptor, SAC: Stent assisted coiling

	All cases	P value	UA	P value	RA	P value
All responders	65% (±26%)		69% (±25%)		61% (±29%)	
Training background		.91		.73		.851
Open Neurosurgeons	63% (±29%)		64% (±30%)		63% (±31%)	
Dual-trained Neurosurgeons	68% (±23%)		72% (±24%)		65% (±24%)	
INR	65% (±25%)		70% (±24%)		59% (±30%)	
Years of experience		.97		.992		.889
0-5 years	67% (±22%)		69% (±24%)		65% (±22%)	
6-10 years	63% (±27%)		69% (±23%)		57% (±34%)	
11-20 years	67% (±20%)		71% (±20%)		64% (±21%)	
>20 years	63% (±40%)		67% (±40%)		59% (±43%)	
Practice location		.011		.025		.013
North America	78% (±26%)		81% (±27%)		51% (±27%)	
Europe	66% (±22%)		61% (±21%)		76% (±26%)	

**Supplemental Table 7:** Mean proportion of votes for randomized trial inclusion: \* 25 missing answers

INR: interventional neuroradiologist



**Supplemental Figure 1:** Intra-rater agreement for final treatment choice (surgical versus any endovascular treatment) for all raters, according to background, experience, and for unruptured (UA) and ruptured aneurysms (RA). Green dots represent raters with substantial intra-rater agreement (more than 0.6) and black dots represent raters with intrarater agreement below the substantial level.

INR: Interventional Neuroradiologist, NSx: open neurosurgeon, DT: dual-trained, y: years.

# MCAAT

*Middle Cerebral Artery Aneurysm Trial Questionnaire*

- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
   confidence

### **CASE 1**

47 F

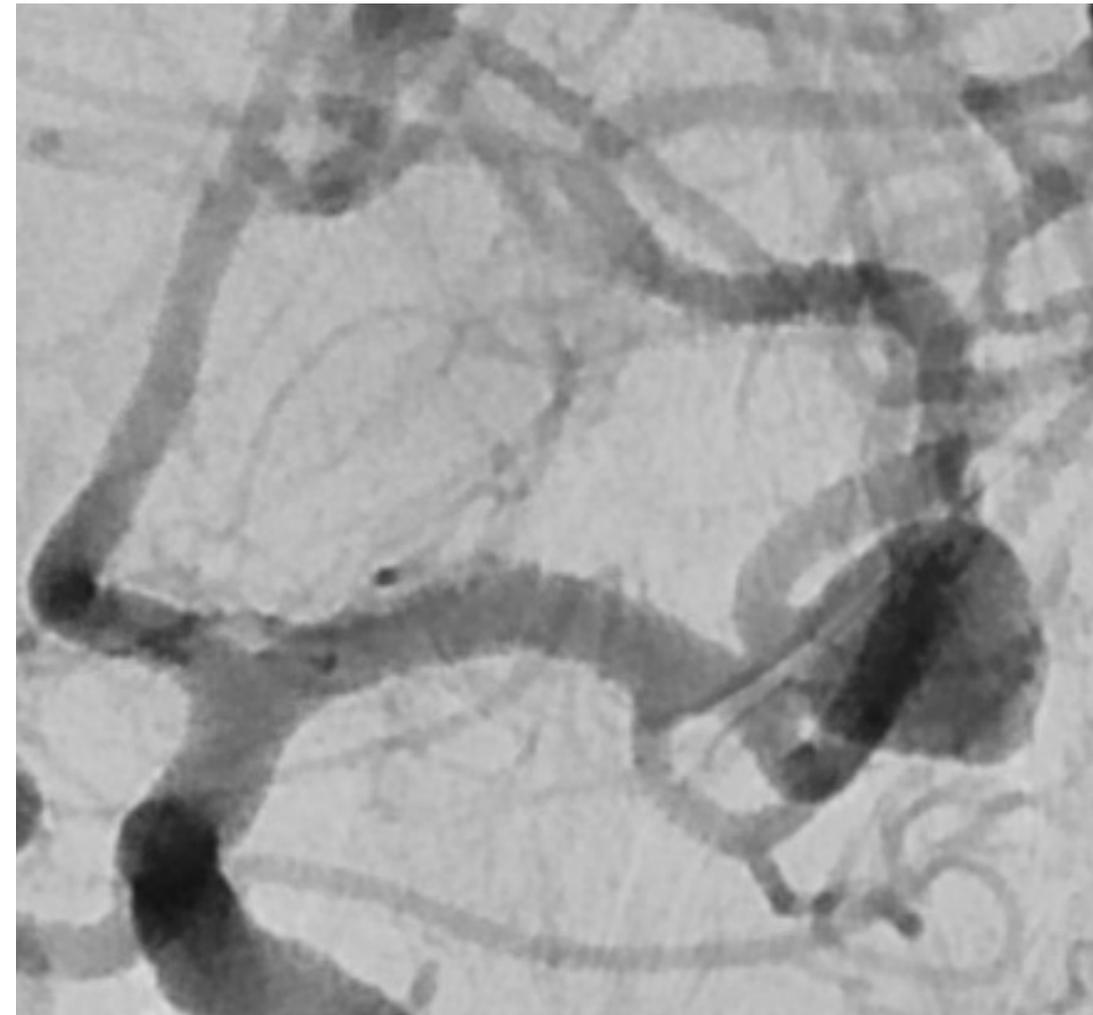
4 mm unruptured left MCA aneurysm

Asymptomatic

Familial history of subarachnoid hemorrhage



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence



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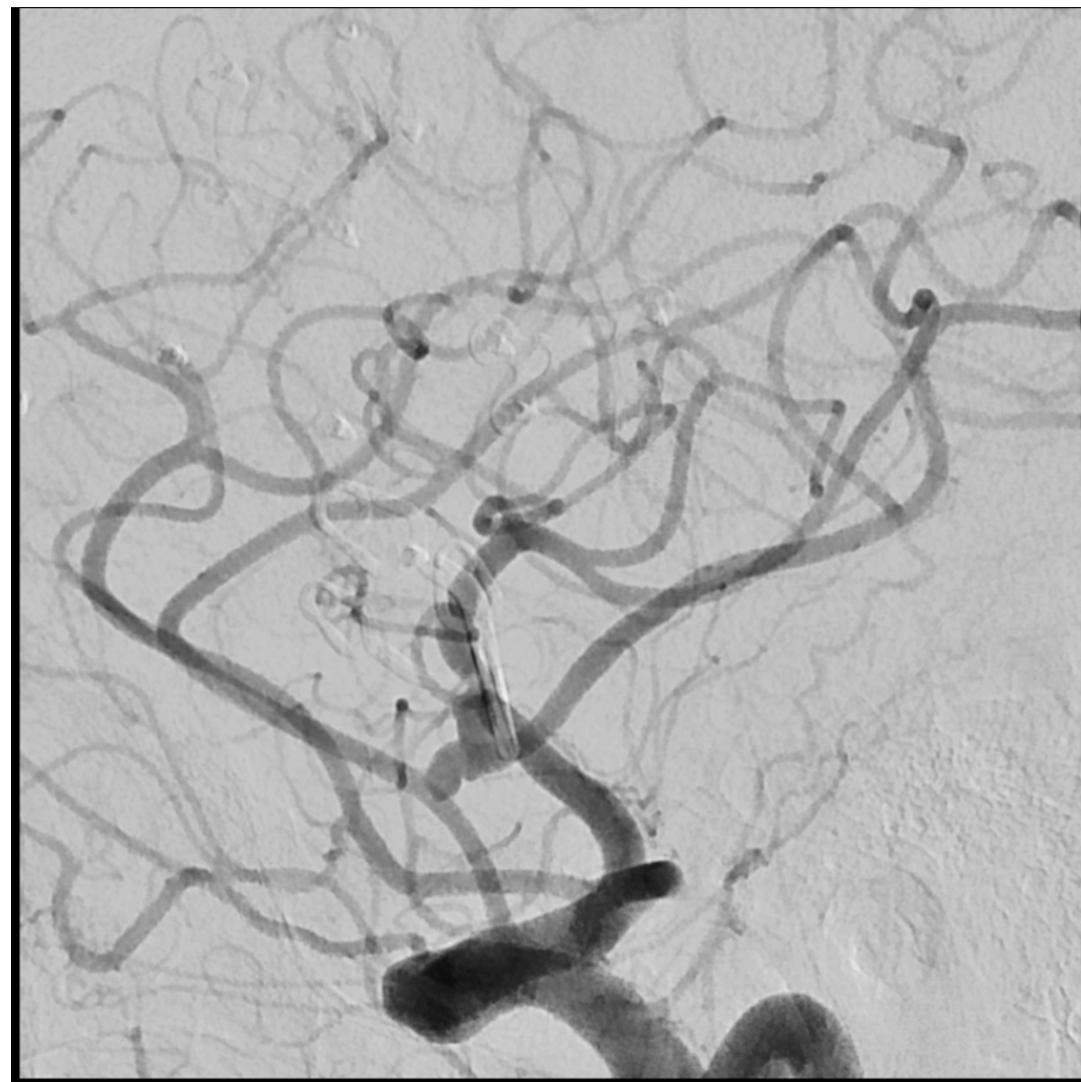
## **CASE 2**

67 F

10 mm unruptured left MCA aneurysm

Asymptomatic

- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence



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### **CASE 3**

70 F

Recurrent previously clipped unruptured left MCA aneurysm

Asymptomatic



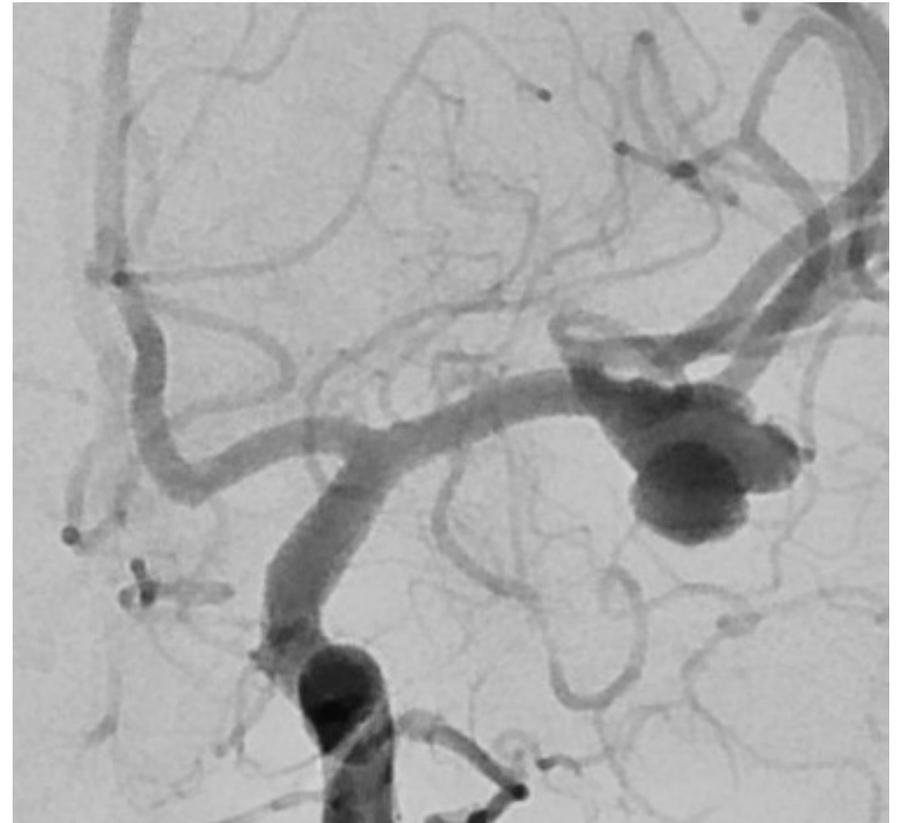
- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
   confidence

### **CASE 5**

70 F

Giant, partially thrombosed and unruptured left MCA aneurysm

Minor stroke



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
   confidence

### **CASE 6**

58 M

16 mm recurrent previously coiled unruptured left MCA aneurysm

Asymptomatic



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

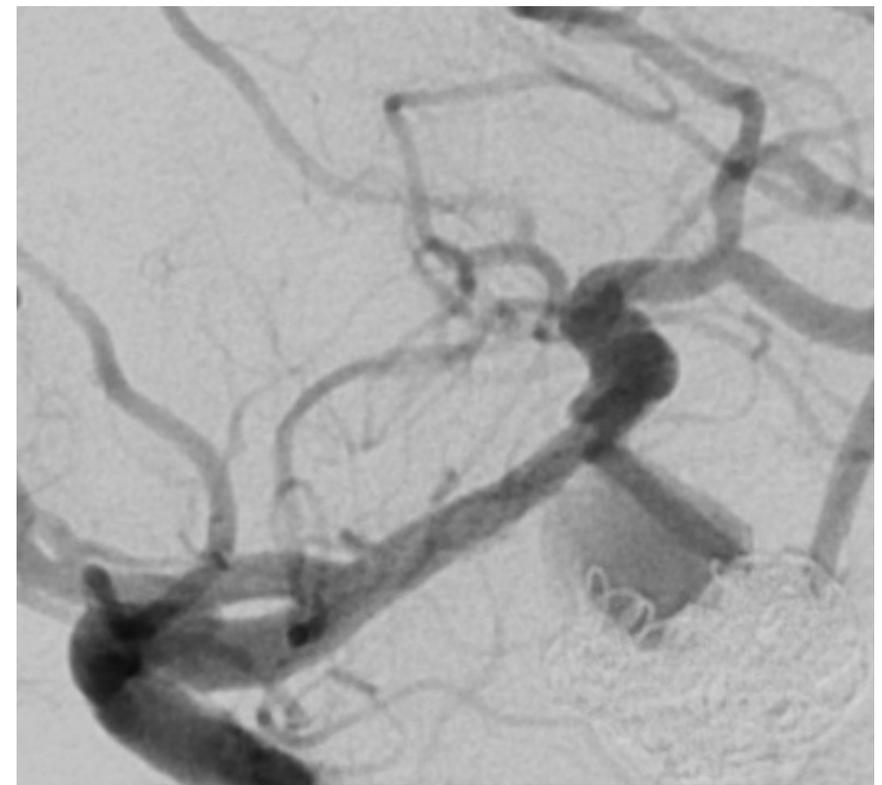
<input type="checkbox"/>									
0%	20%	40%	60%	80%	100%				
not confident	intermediate confidence			very confident					

**CASE 7**

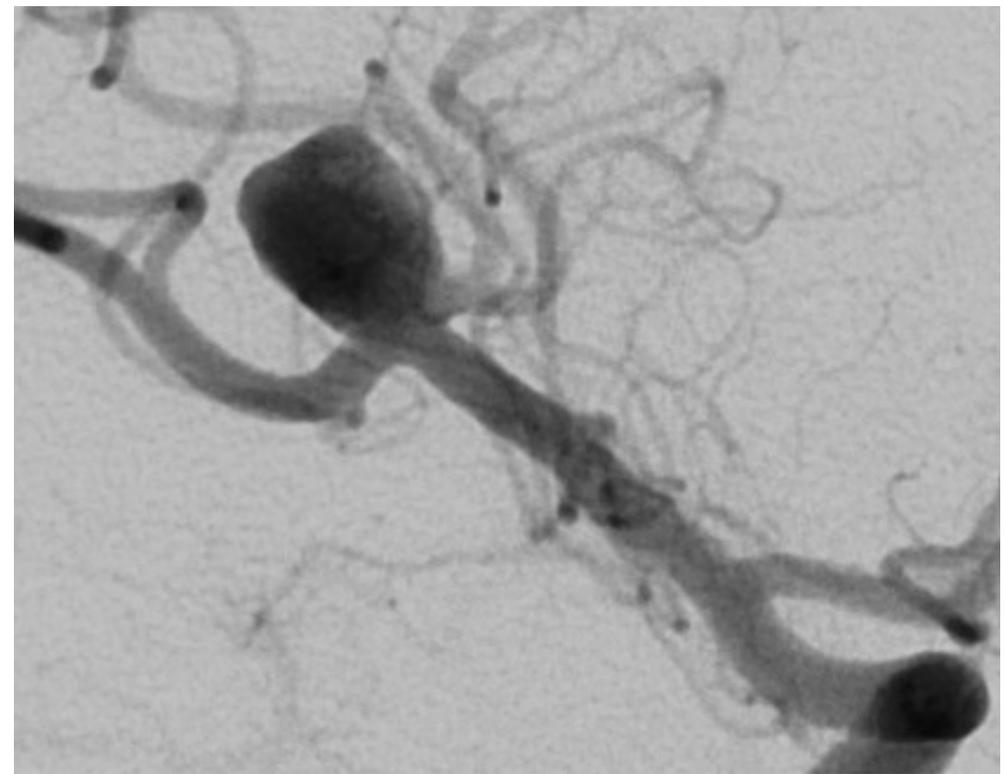
75 M

23 mm recurrent previously coiled giant, partially thrombosed and unruptured left MCA aneurysm

Minor stroke







- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
   confidence

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**CASE 9**

61 F

10 mm unruptured right MCA aneurysm

Asymptomatic

- 1- Is surgical management an option for this patient.  
Select one:  Yes  
 No
  
- 2- Any other option that could be offered to this patient? Choose one:  
 No, only surgical management  
 Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one:  Yes  
 No
  
- 4- What is your final best treatment choice?  
Choose one:  Surgical management  
 Endovascular  
If you choose endovascular, please choose one:  
 Coils +/- balloon remodeling  
 Coils +/- stent  
 Flow diversion  
 Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

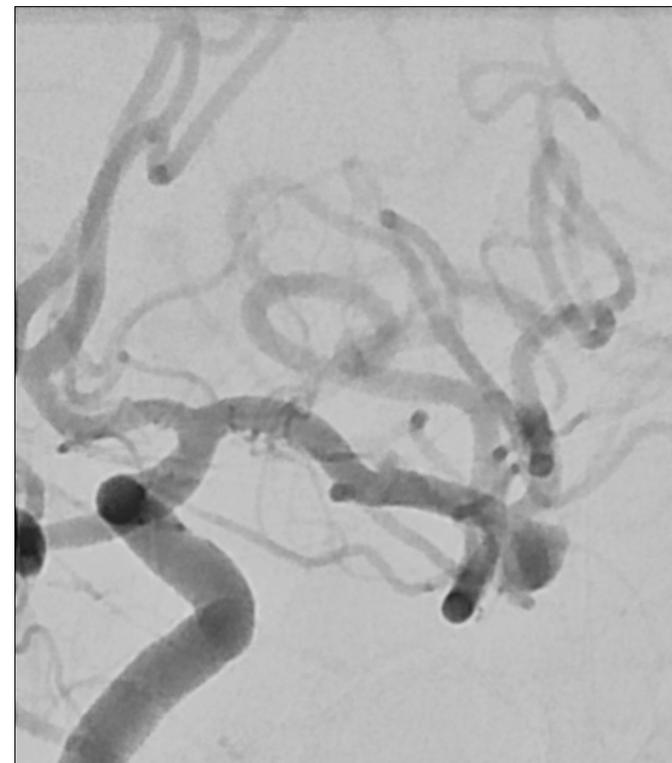
<input type="checkbox"/>									
0%	20%	40%	60%	80%	100%				
not confident	intermediate confidence			very confident					

**CASE 10**

70 F

6 mm unruptured left MCA aneurysm

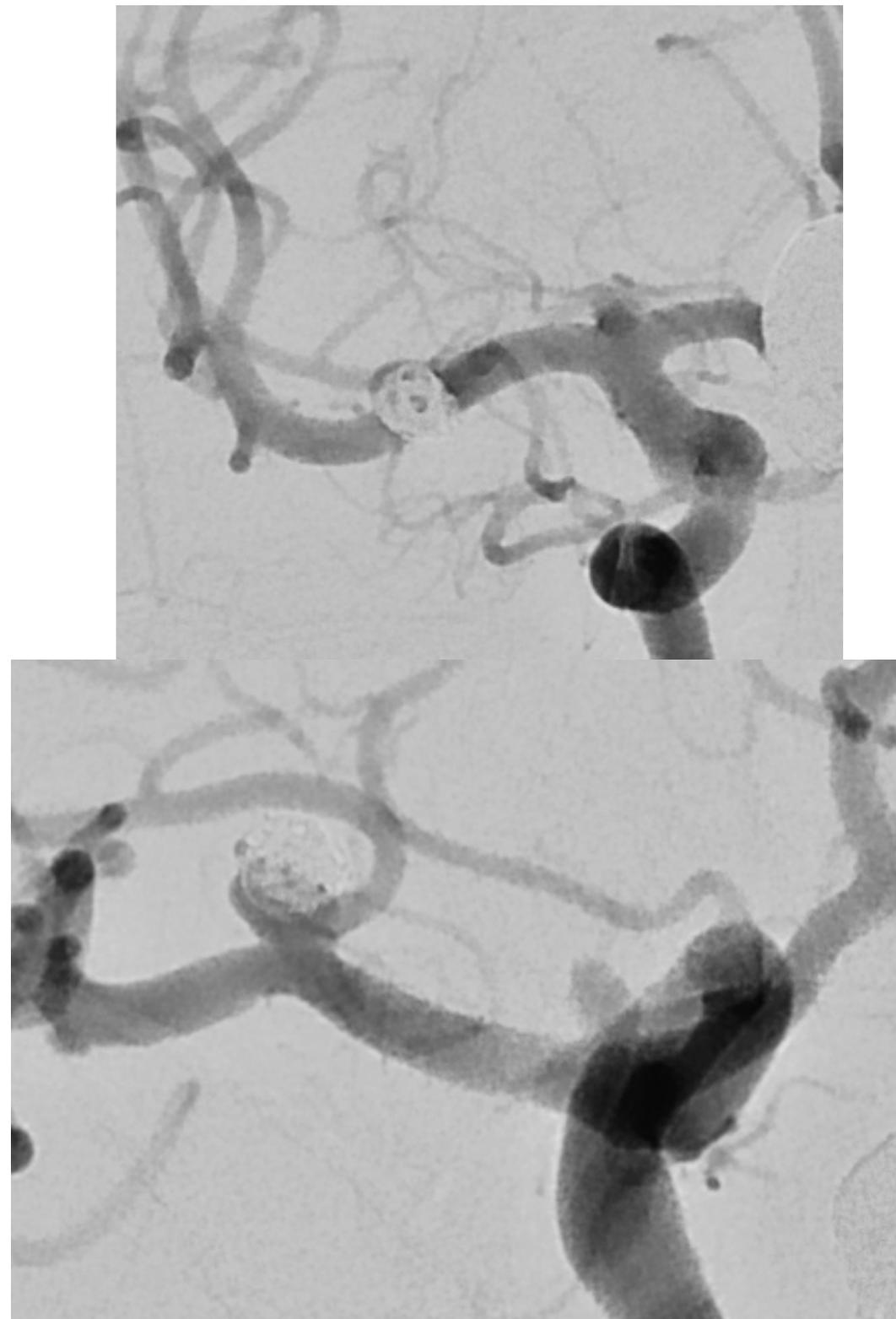
Asymptomatic



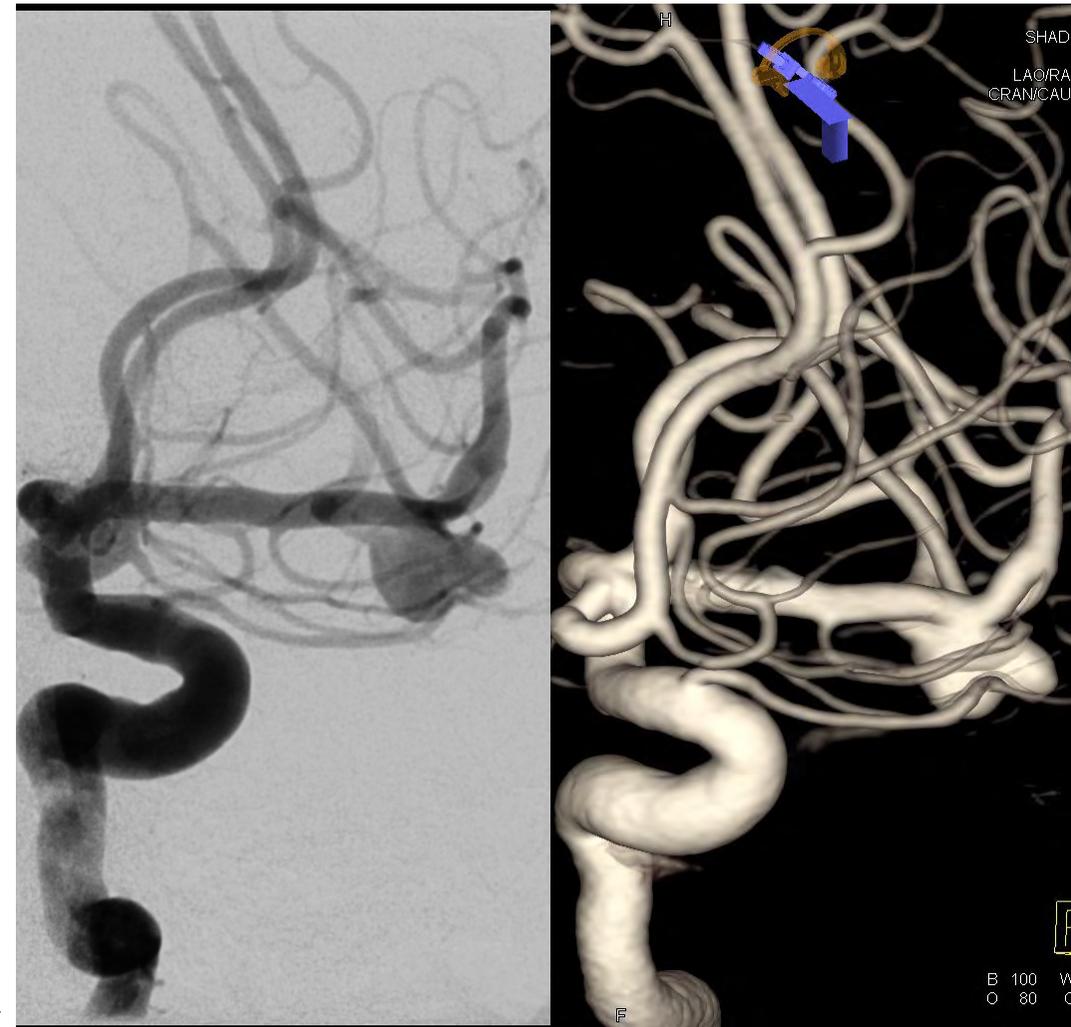
- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
 0%    20%    40%    60%    80%    100%  
 not confident                      intermediate                      very confident  
    confidence

**CASE 11**

Previously ruptured basilar terminus aneurysm treated with coils  
 Recurrent previously coiled 5 mm unruptured right MCA aneurysm  
 Associated 4 mm right carotid terminus aneurysm.



- 1- Is surgical management an option for this patient.  
Select one: Yes No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
 0%    20%    40%    60%    80%    100%  
 not confident                      intermediate                      very confident  
    confidence



**CASE 12**

71 M

10 mm unruptured left MCA aneurysm

Asymptomatic

- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
         
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
   confidence

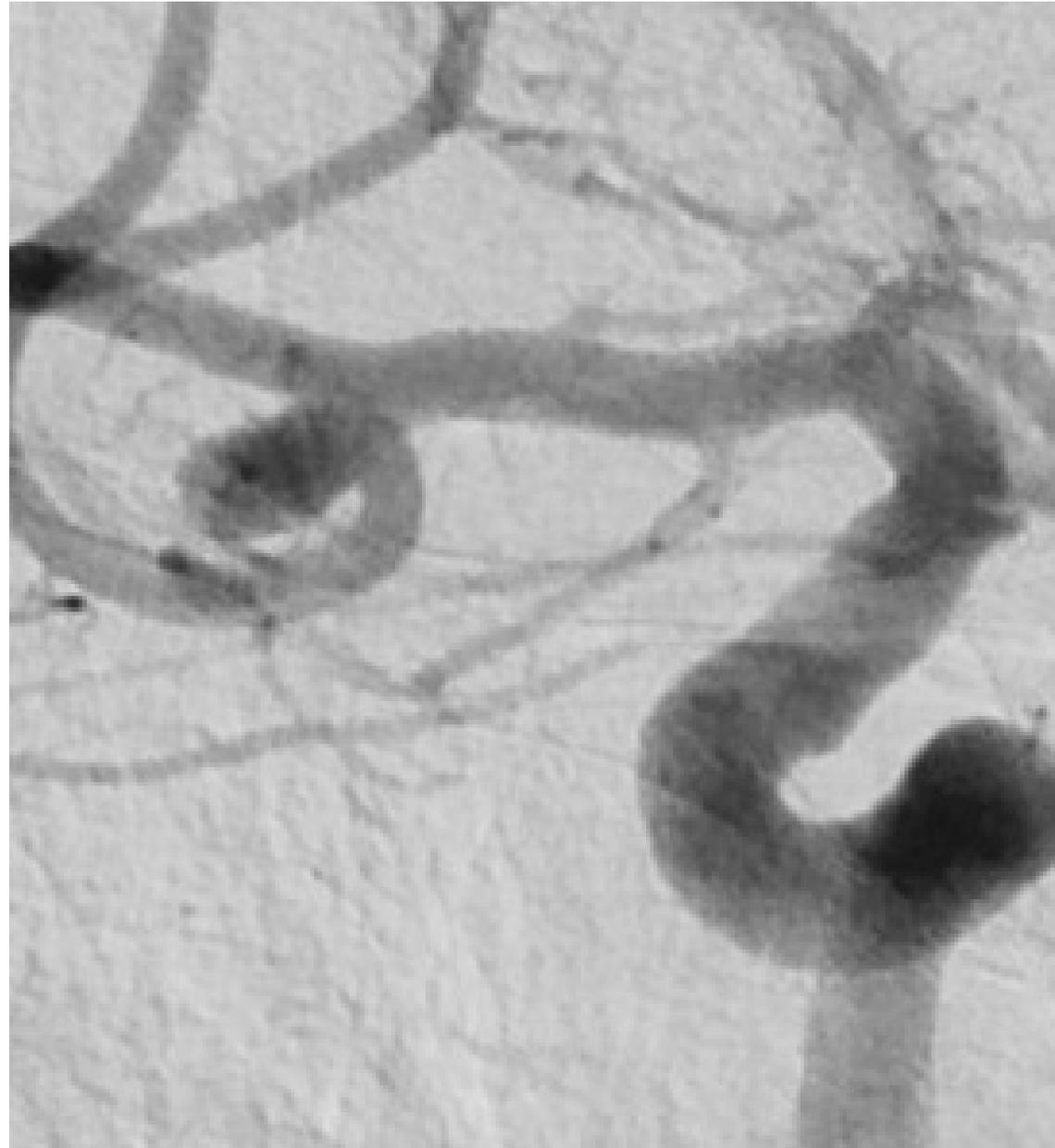
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**CASE 13**

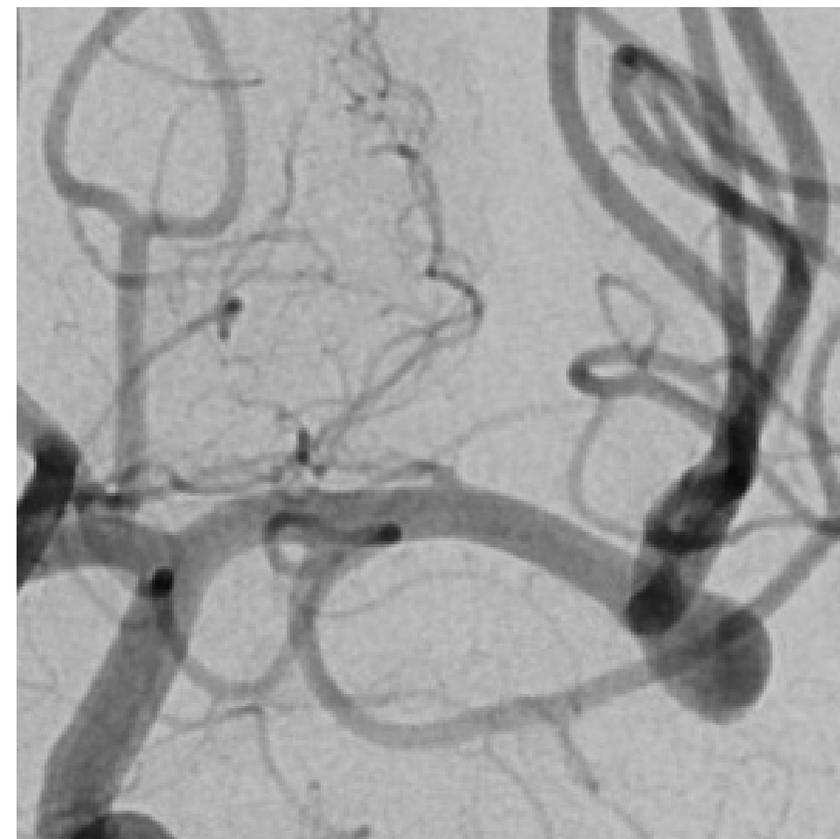
72 F

5 mm unruptured right MCA aneurysm

Asymptomatic







- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

---

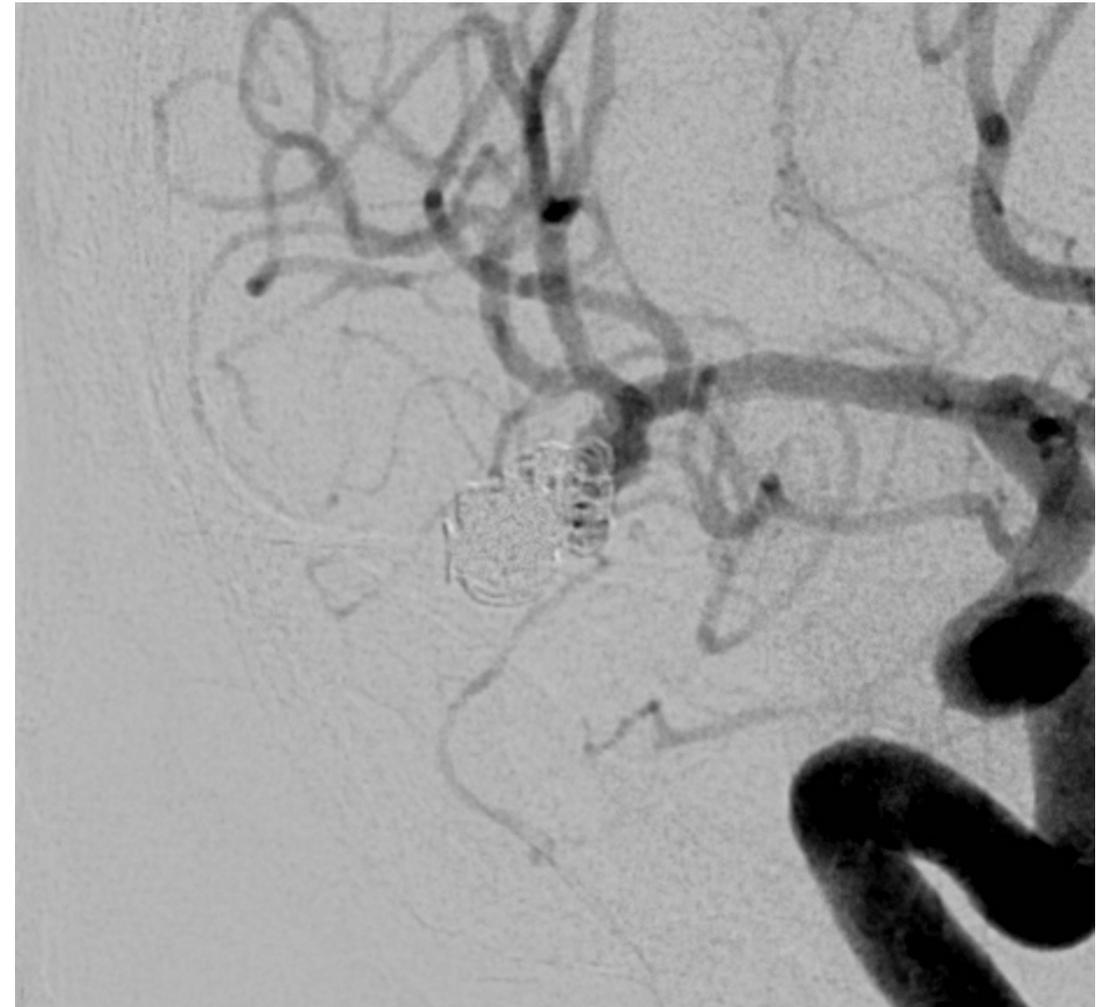
### **CASE 15**

61 M

8 mm unruptured left MCA aneurysm

Asymptomatic

- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence



### **CASE 16**

57 F

8 mm recurrent previously ruptured right MCA aneurysm



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

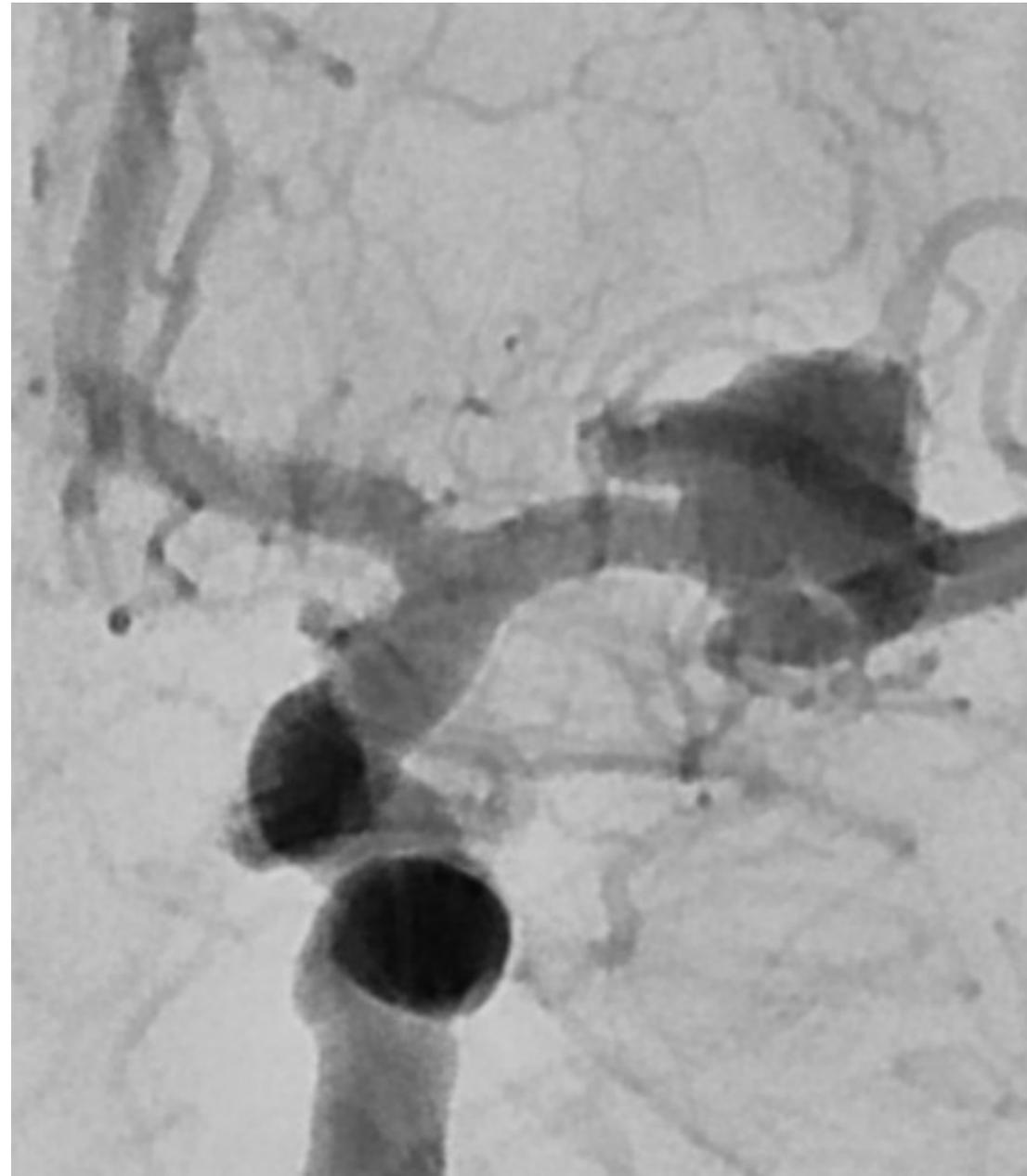
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**CASE 18**

57 F

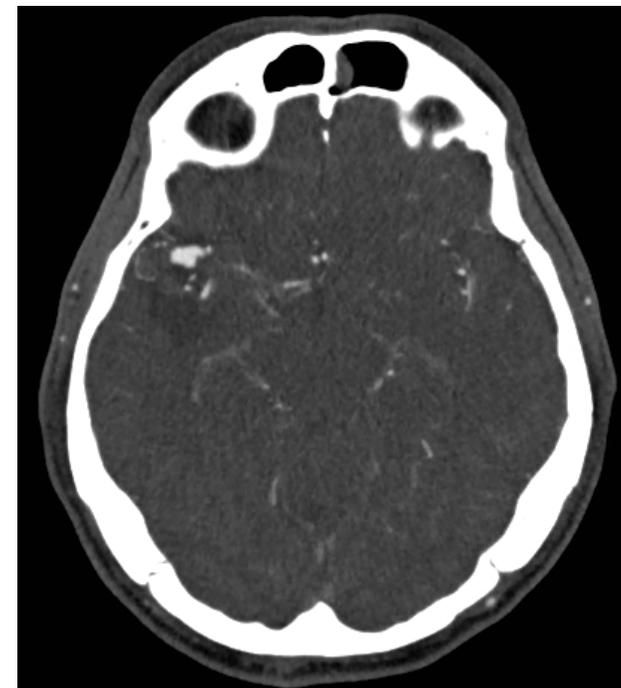
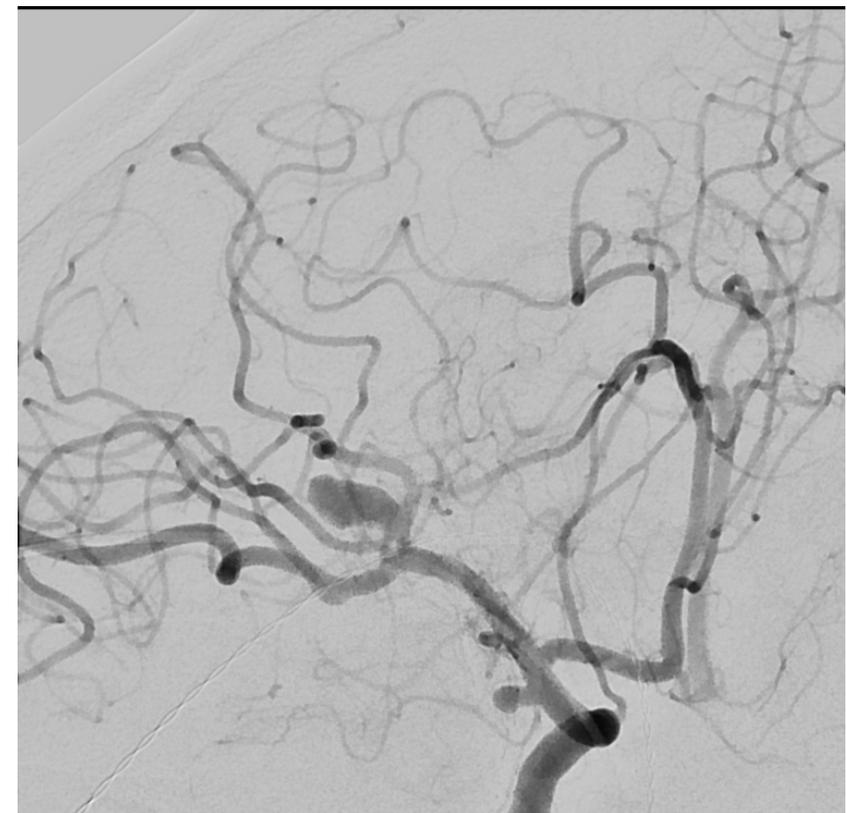
8 mm unruptured left MCA aneurysm

Asymptomatic



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

<input type="checkbox"/>									
0%	20%	40%	60%	80%	100%				
not confident	intermediate confidence			very confident					



**CASE 19**

56 M

17 mm unruptured partially thrombosed right MCA aneurysm.

Asymptomatic

- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

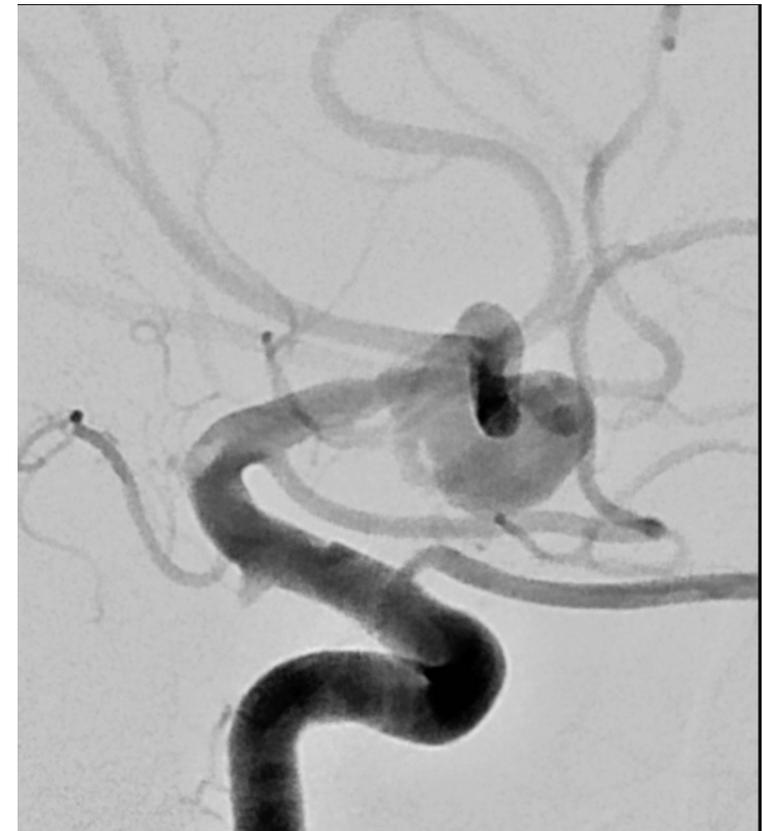
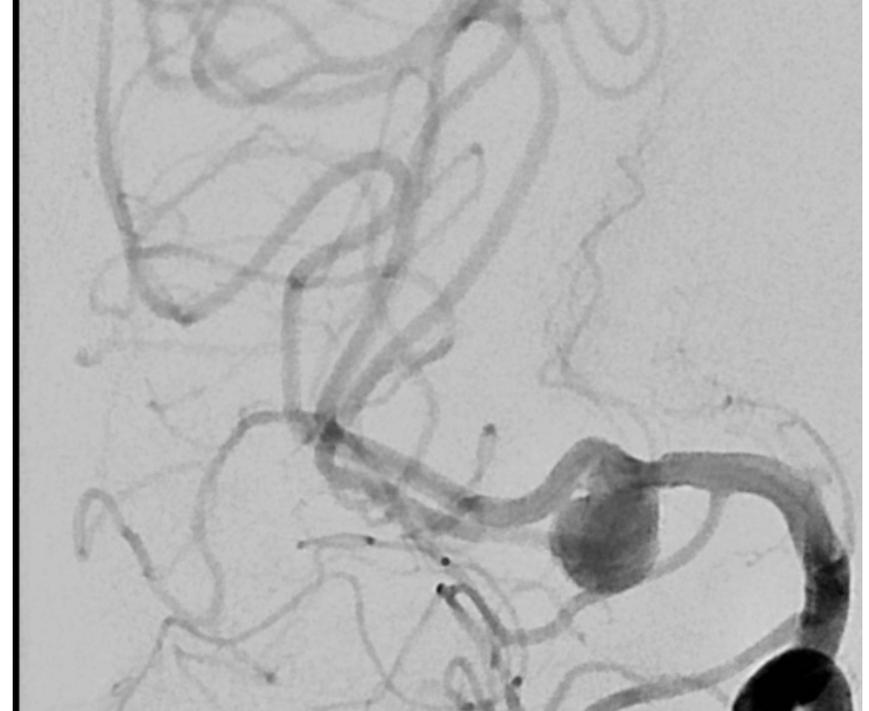
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**CASE 20**

55 F

12 mm unruptured right MCA aneurysm

Asymptomatic





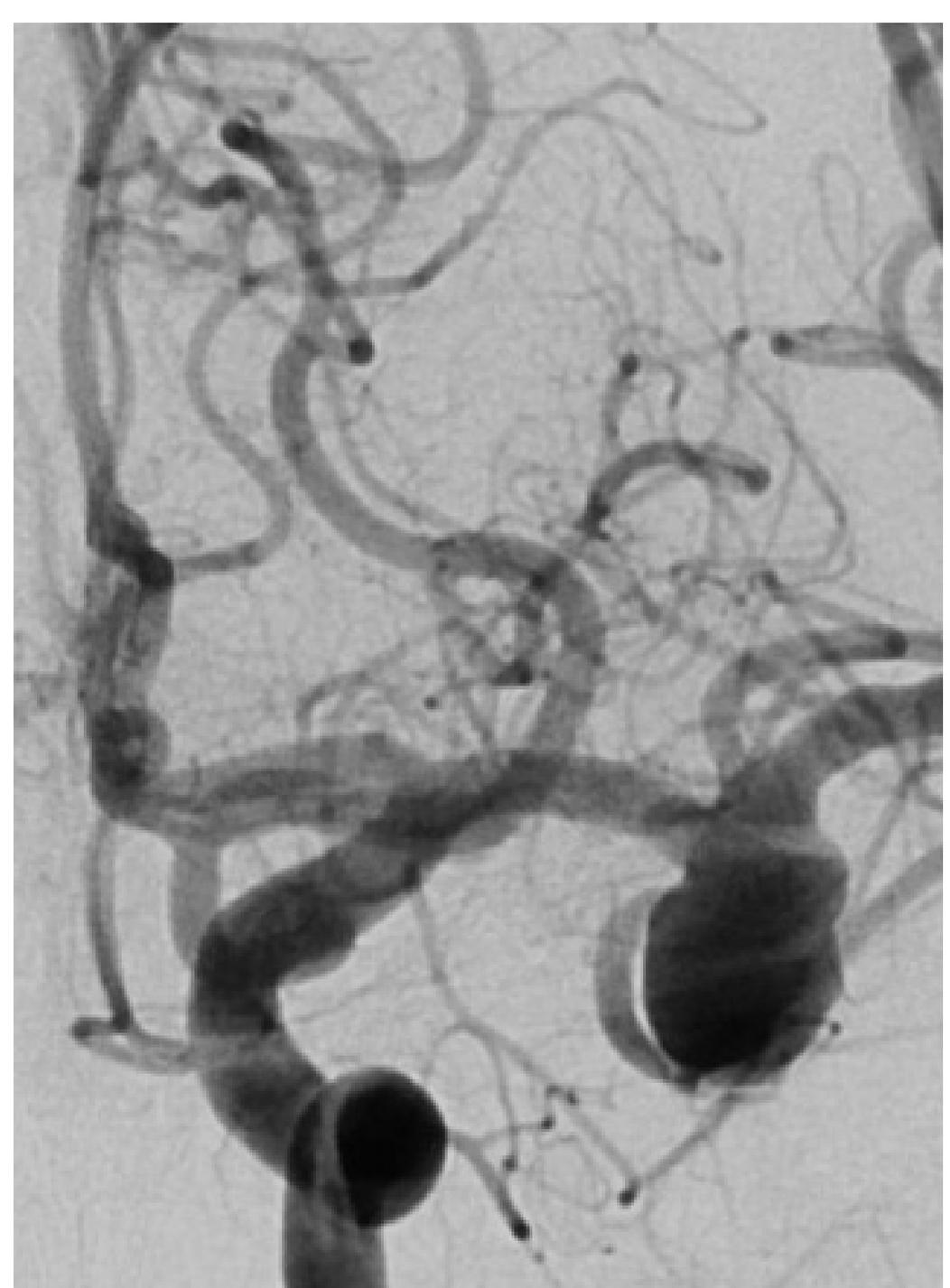
- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

**CASE 22**

66 F

12 mm unruptured left MCA aneurysm

Asymptomatic



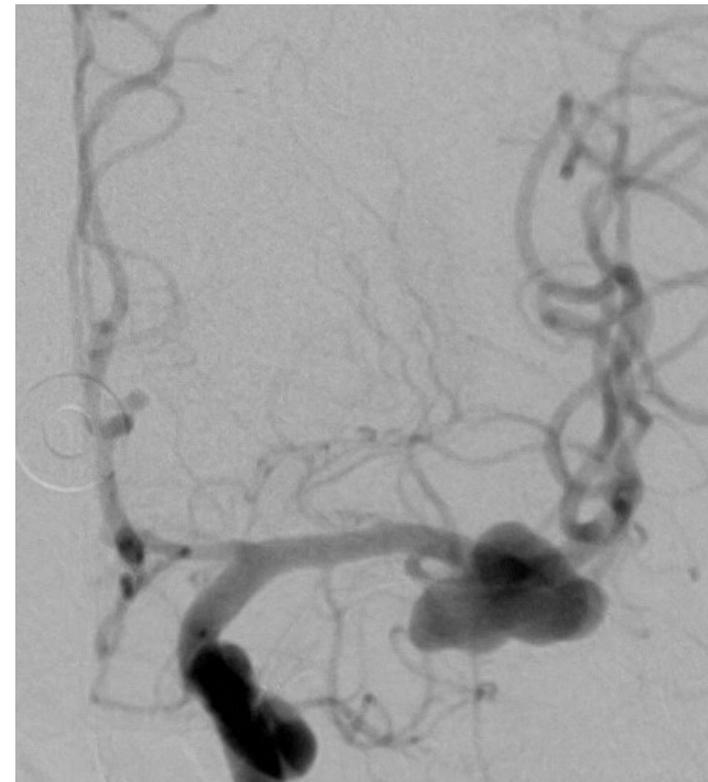
- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

### **CASE 23**

67 F

15 mm unruptured left MCA aneurysm

Asymptomatic



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

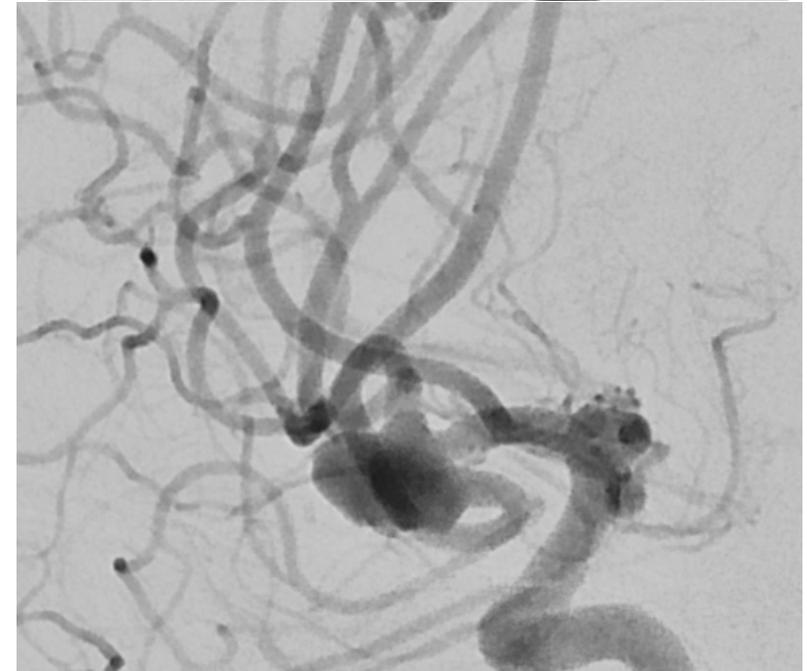
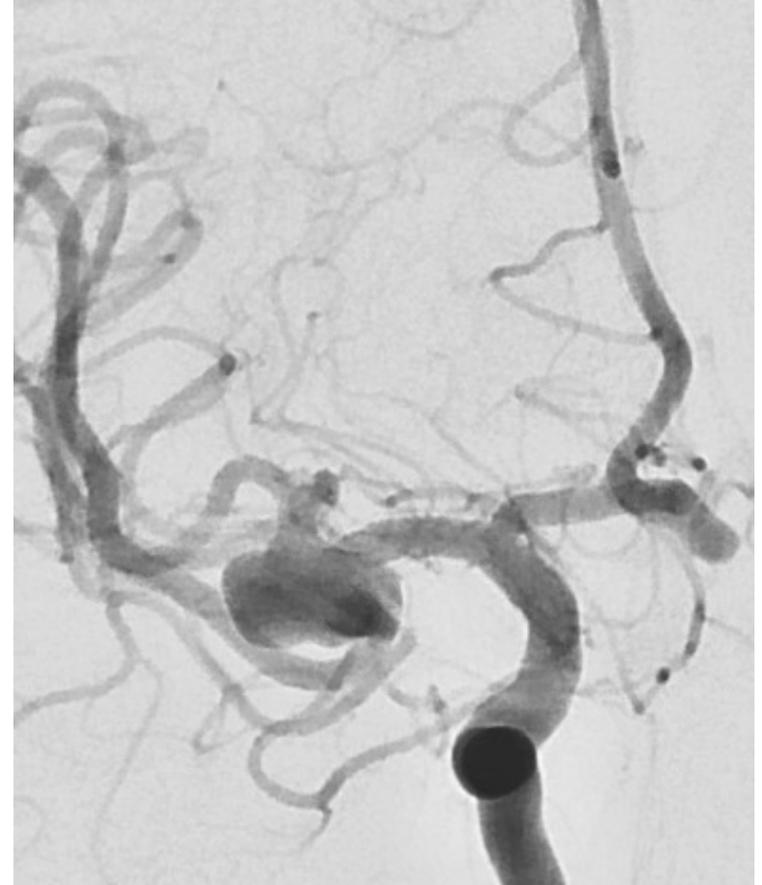
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
0%	20%	40%	60%	80%	100%
not confident		intermediate confidence		very confident	

**CASE 24**

52 F

12 mm unruptured right MCA aneurysm

Asymptomatic





- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
         
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
   confidence

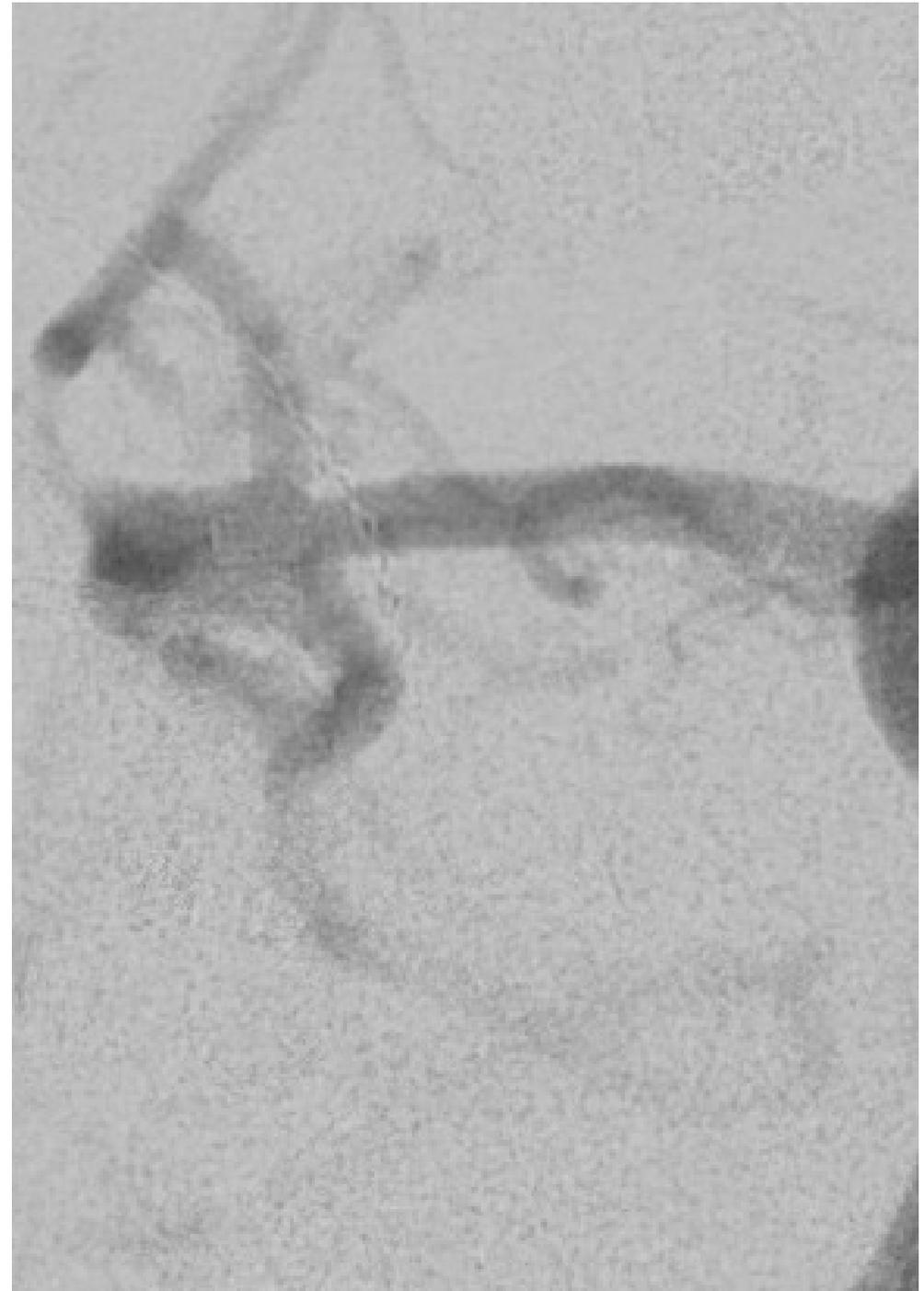
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**CASE 26**

42 F

8 mm unruptured right MCA aneurysm

Asymptomatic



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

### **CASE 27**

38 M

4 mm unruptured right MCA aneurysm

Asymptomatic



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

<input type="checkbox"/>								
0%	20%	40%	60%	80%	100%			
not confident	intermediate confidence			very confident				

**CASE 28**

57 F

8 mm unruptured right MCA aneurysm

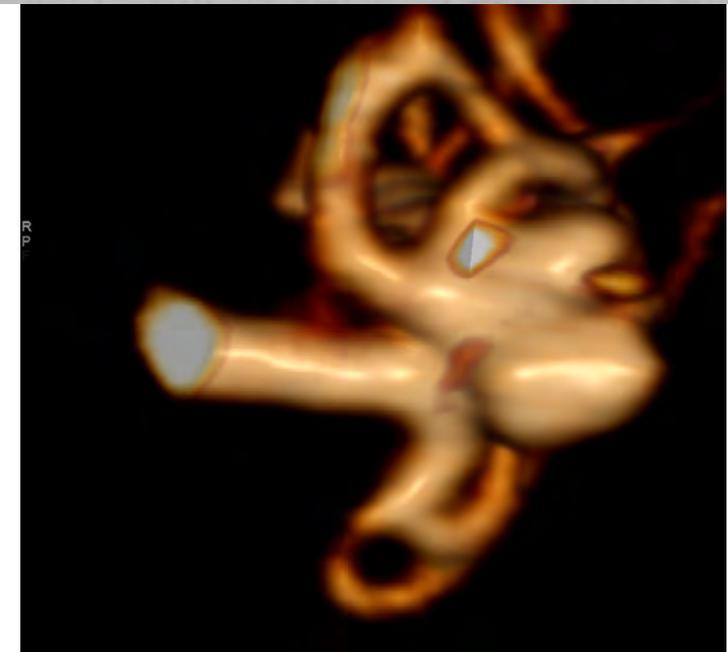
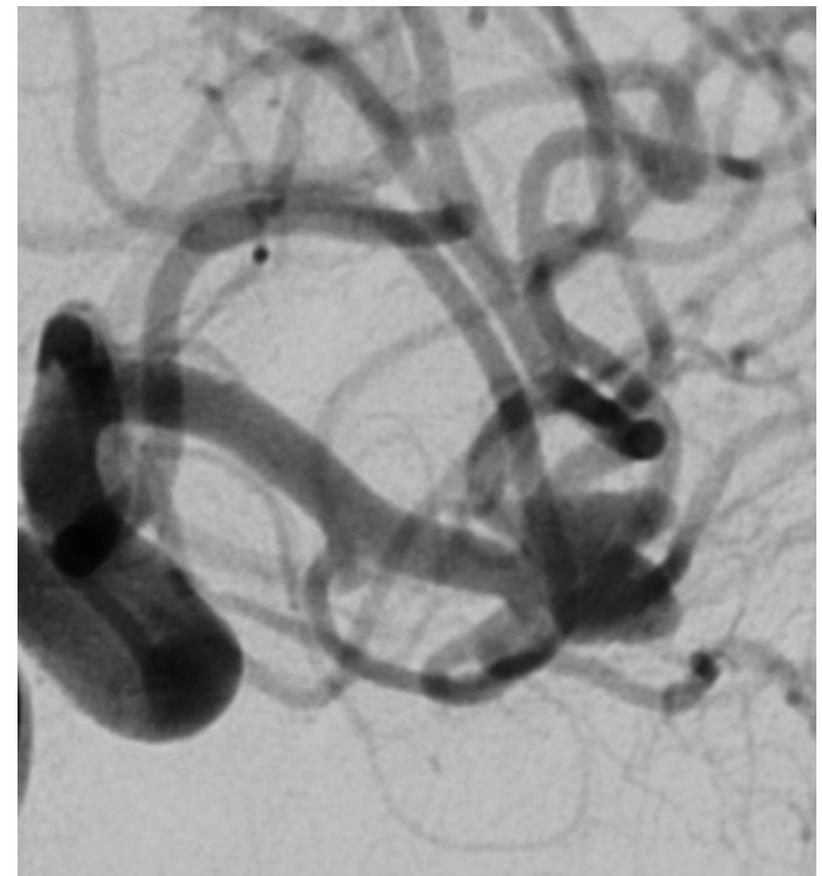
Asymptomatic





- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
0%	20%	40%	60%	80%	100%
not confident	intermediate confidence			very confident	



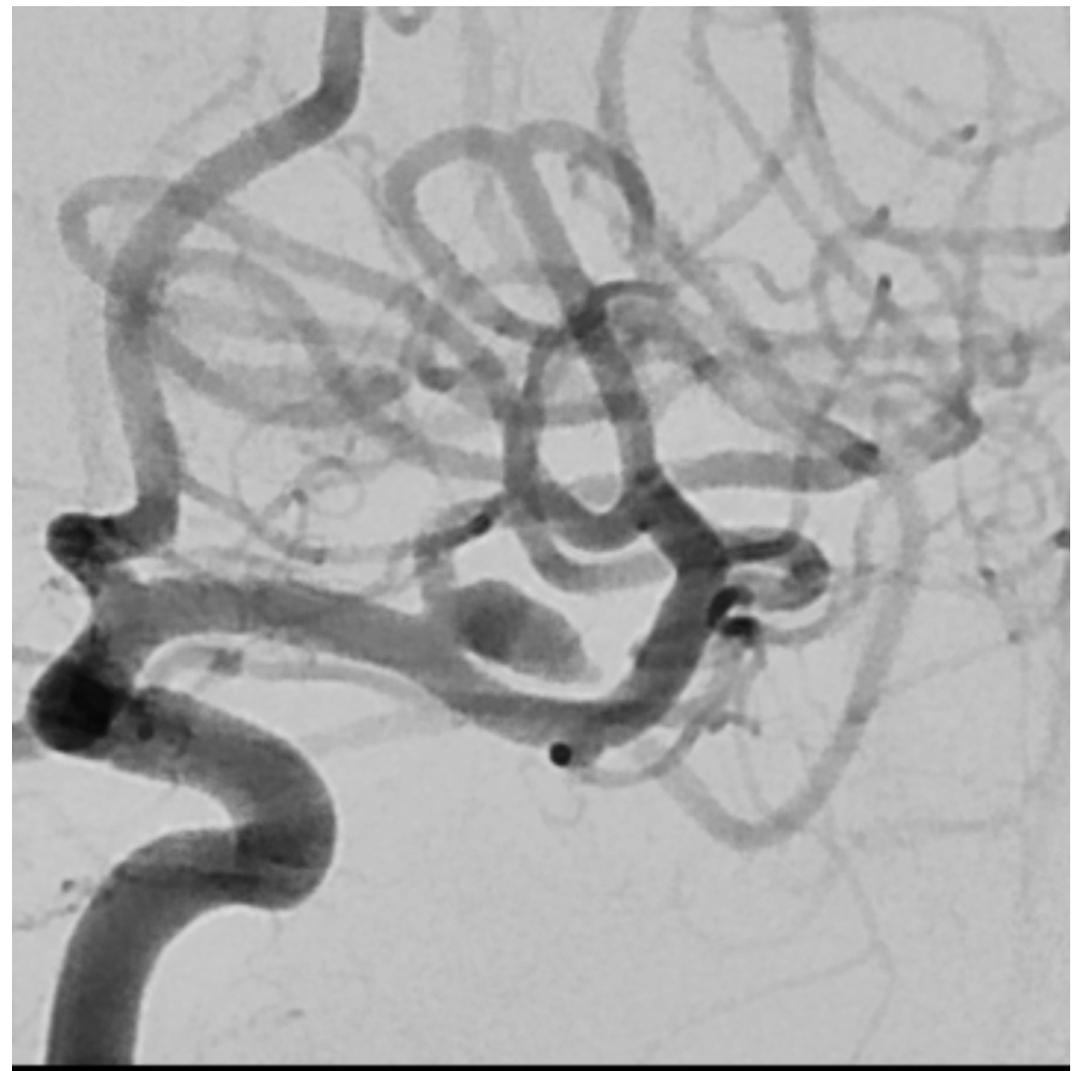
### **CASE 30**

64 F

7 mm unruptured left MCA aneurysm

Asymptomatic

- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
 0%    20%    40%    60%    80%    100%  
 not confident                      intermediate                      very confident  
    confidence

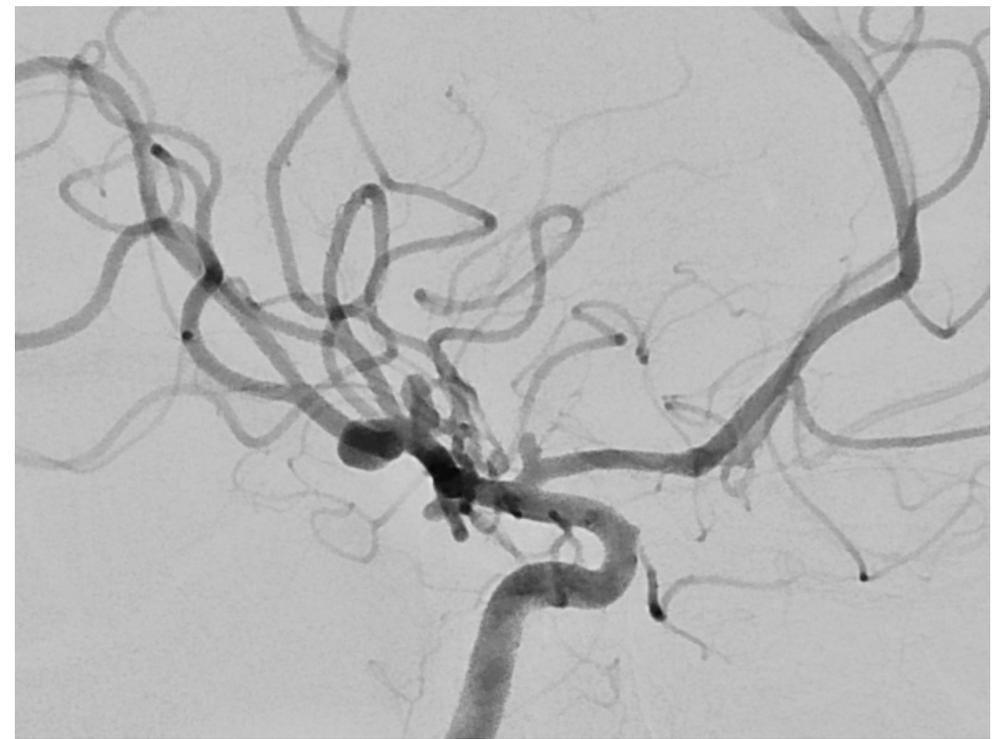


### **CASE 31**

36 F

7 mm left MCA aneurysm

Grade 1 SAH



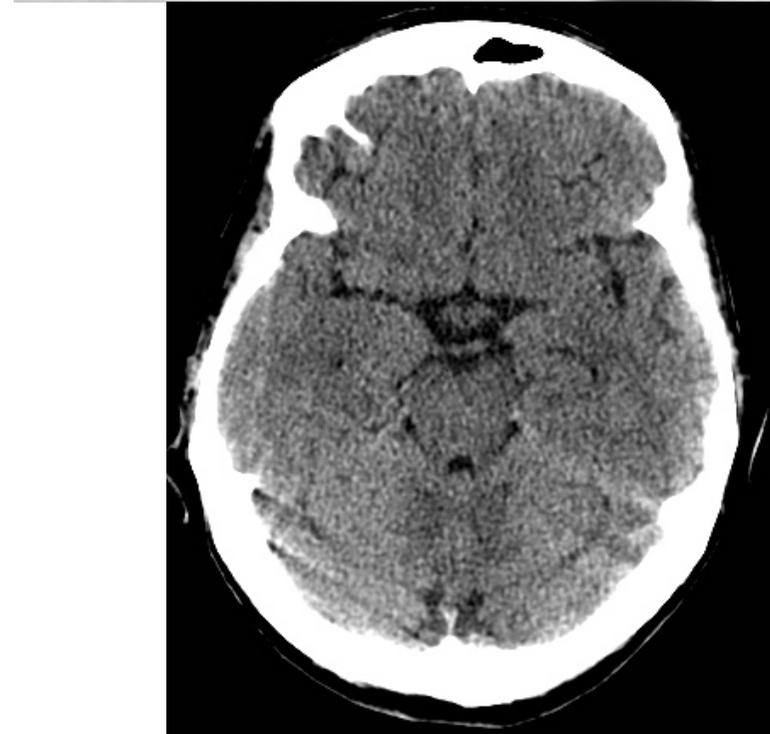
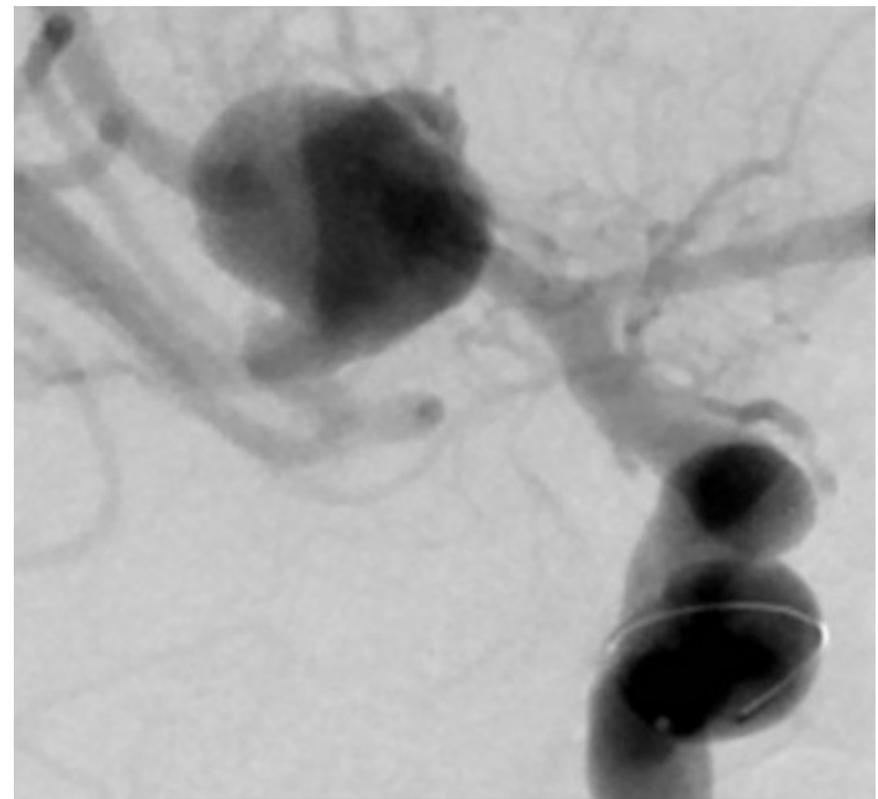
- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate confidence      very confident

**CASE 32**

48 F

Multiple right MCA aneurysms

Grade 1 SAH



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

**CASE 33**

58 F

11 mm right MCA aneurysm

Grade 2 SAH











- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

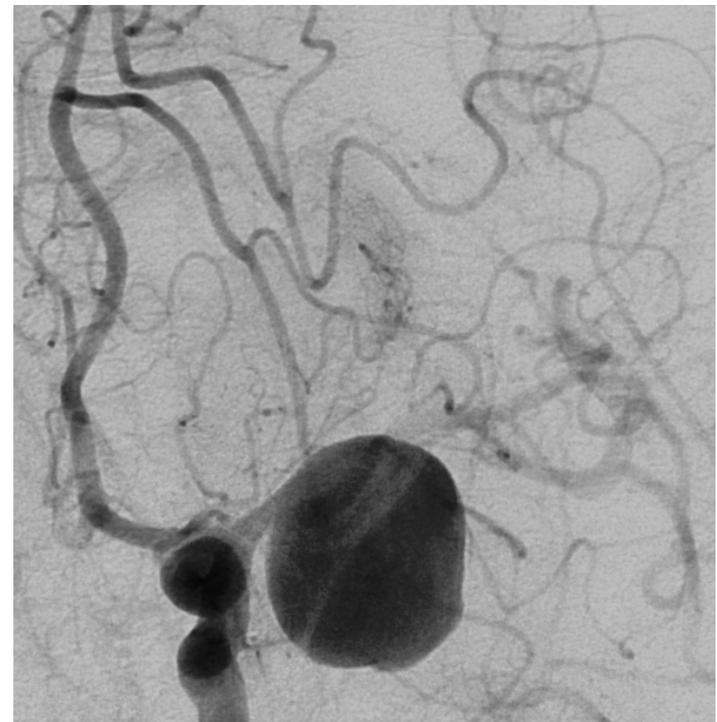
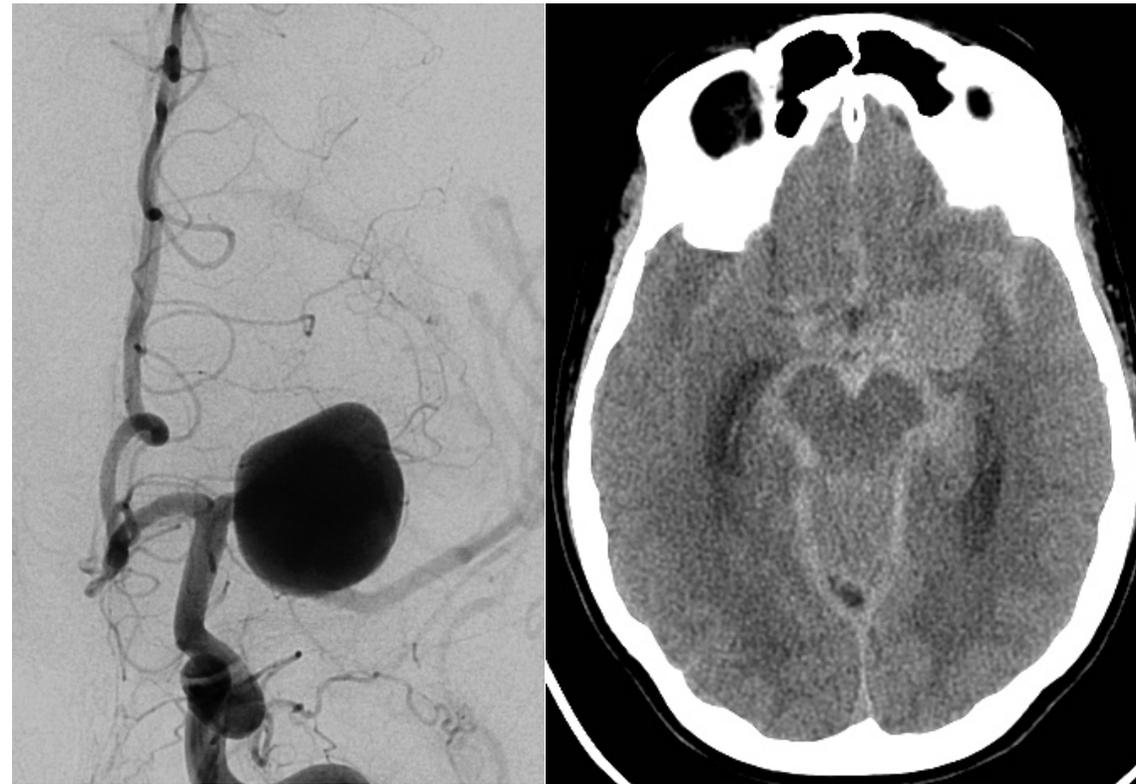
<input type="checkbox"/>									
0%	20%	40%	60%	80%	100%				
not confident	intermediate confidence			very confident					

**CASE 39**

49 F

20 mm left MCA aneurysm

Grade 2 SAH

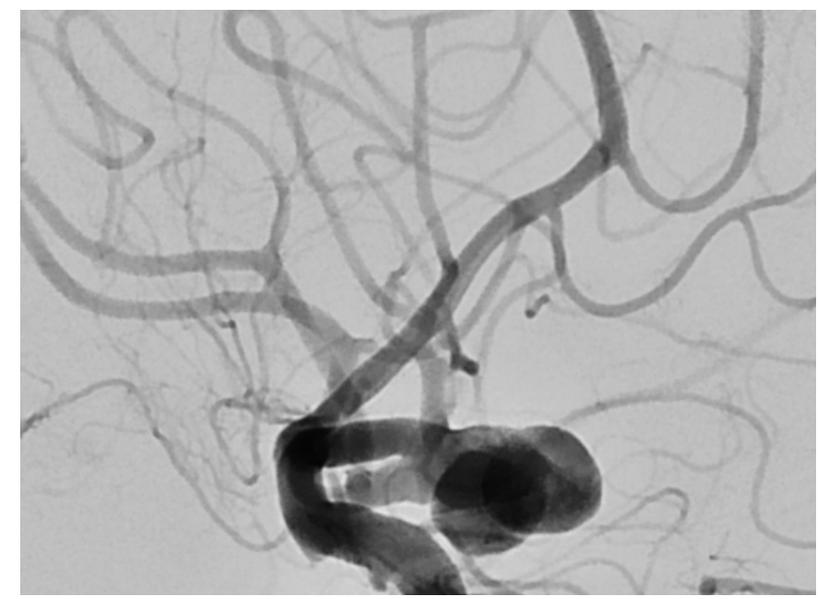
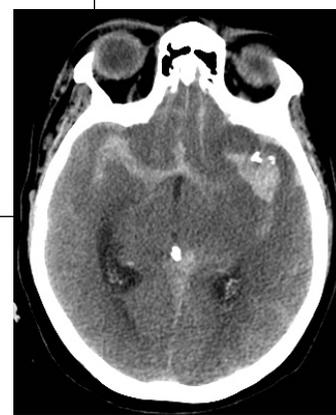
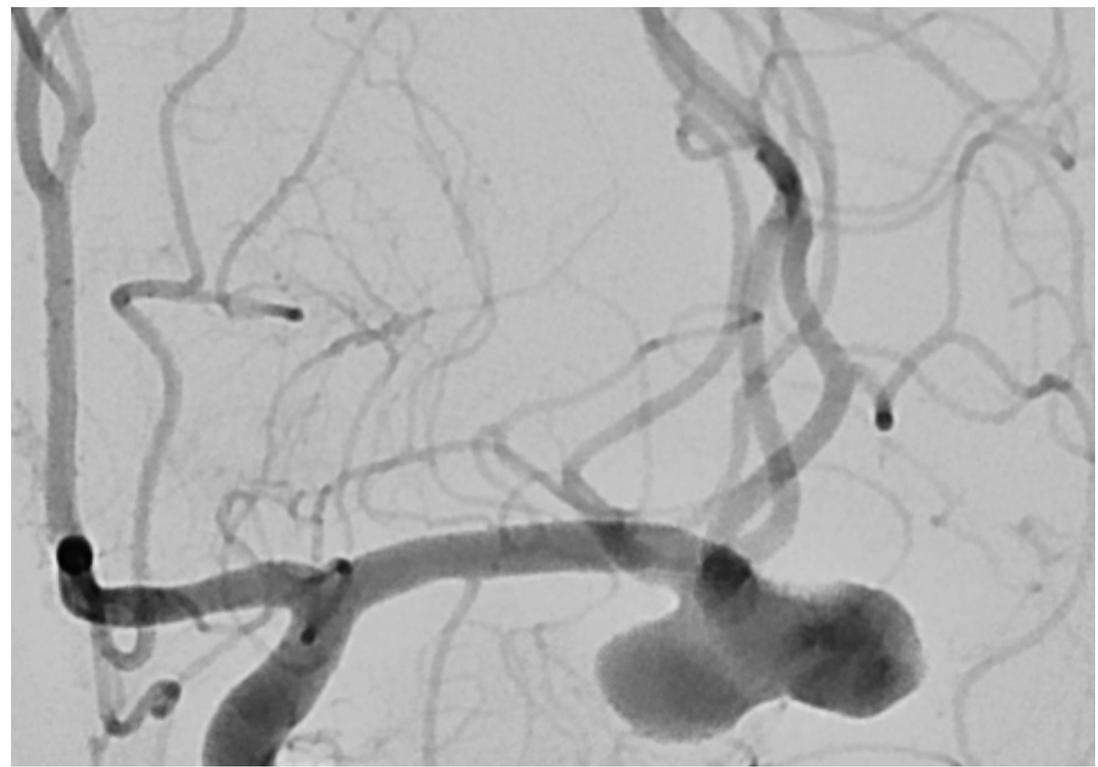








- 1- Is surgical management an option for this patient.  
 Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
 Choose one: Yes  
No
- 4- What is your final best treatment choice?  
 Choose one: Surgical management  
Endovascular  
 If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
            
 0%    20%    40%    60%    80%    100%  
 not confident                      intermediate confidence                      very confident



**CASE 43**

59 F  
 17 mm left MCA aneurysm  
 Grade 3 SAH

- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
  
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
  
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
  
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
  
- 5- How confident are you regarding your final treatment choice?  

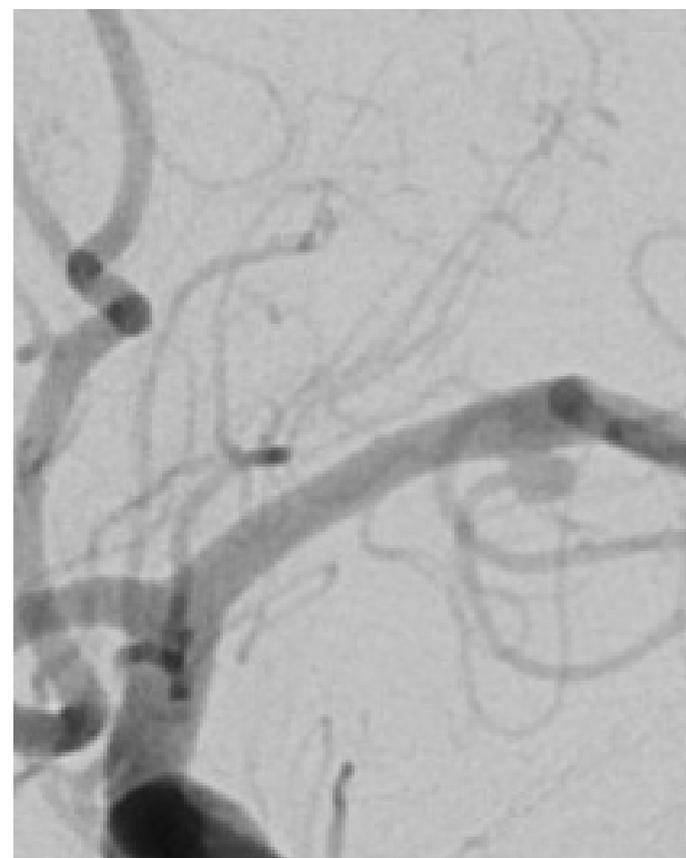
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
0%	20%	40%	60%	80%	100%
not confident	intermediate confidence			very confident	

**CASE 44**

72 F

3 mm left MCA aneurysm

Grade 2 SAH































- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
                                 confidence

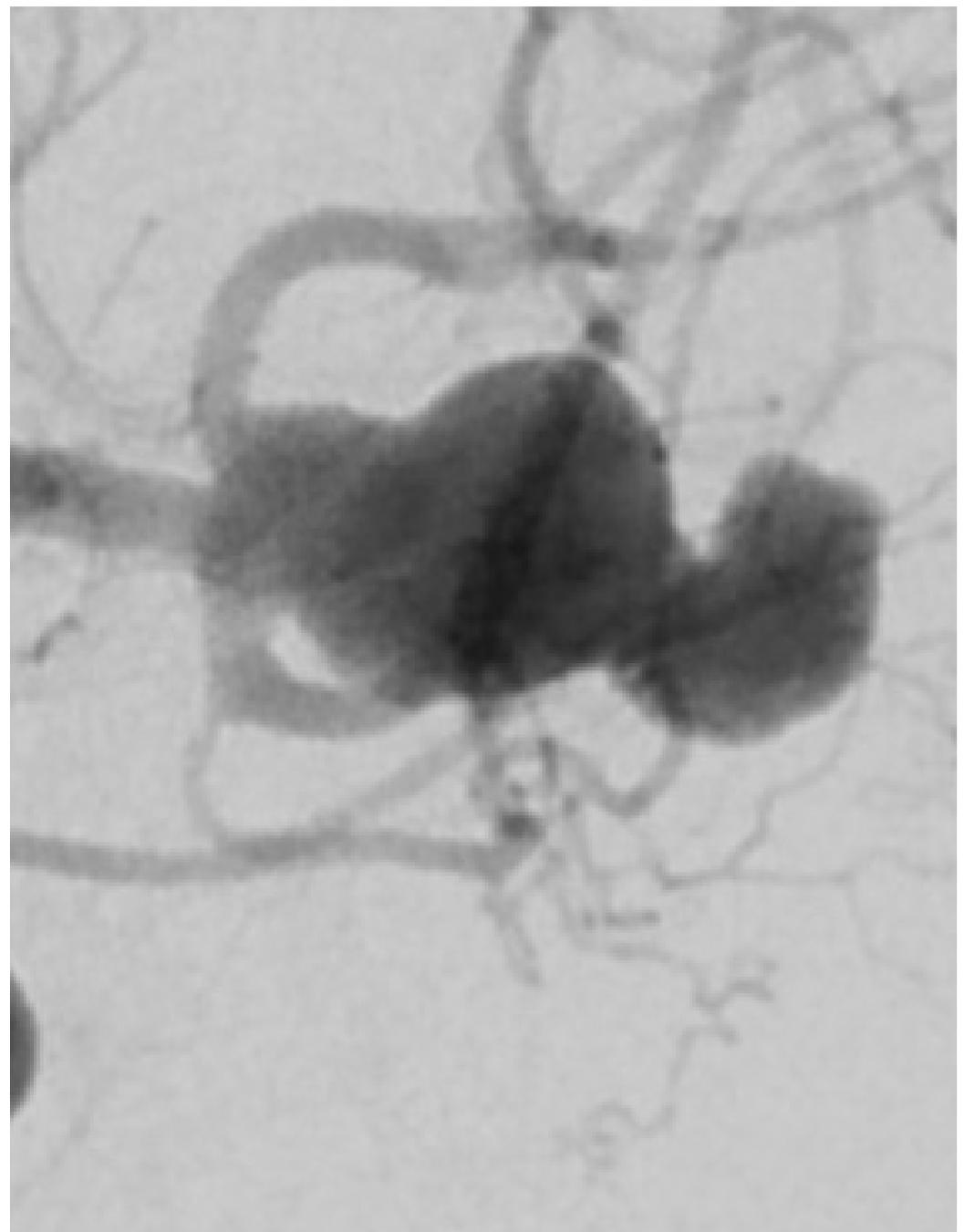
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**CASE 59**

64 F

14 mm left MCA aneurysm

Grade 2 SAH



- 1- Is surgical management an option for this patient.  
Select one: Yes  
No
- 2- Any other option that could be offered to this patient? Choose one:  
No, only surgical management  
Endovascular treatment
- 3- Would you be willing to recruit this patient in an RCT that would give a 50% chance of surgical management and a 50% of endovascular treatment?  
Choose one: Yes  
No
- 4- What is your final best treatment choice?  
Choose one: Surgical management  
Endovascular  
If you choose endovascular, please choose one:  
Coils +/- balloon remodeling  
Coils +/- stent  
Flow diversion  
Intra-saccular flow disruption (i.e. WEB).
- 5- How confident are you regarding your final treatment choice?  
           
0%      20%      40%      60%      80%      100%  
not confident      intermediate      very confident  
   confidence

**CASE 60**

39 M

3 mm right MCA aneurysm

Grade 2 SAH

