EUROPEAN
BIFURCATION CLUB

New classification of treatments

Y. Louvard (Massy, France)

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Why a Classification of Treaments / Bifurcation Stenting Techniques ?

- Define
- Name
- Classify

- Conventional medical nosology
- Homogeneity of groups
- Comparison of available treatments

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The Ideal Classification

- Exhaustive

?

- Simple

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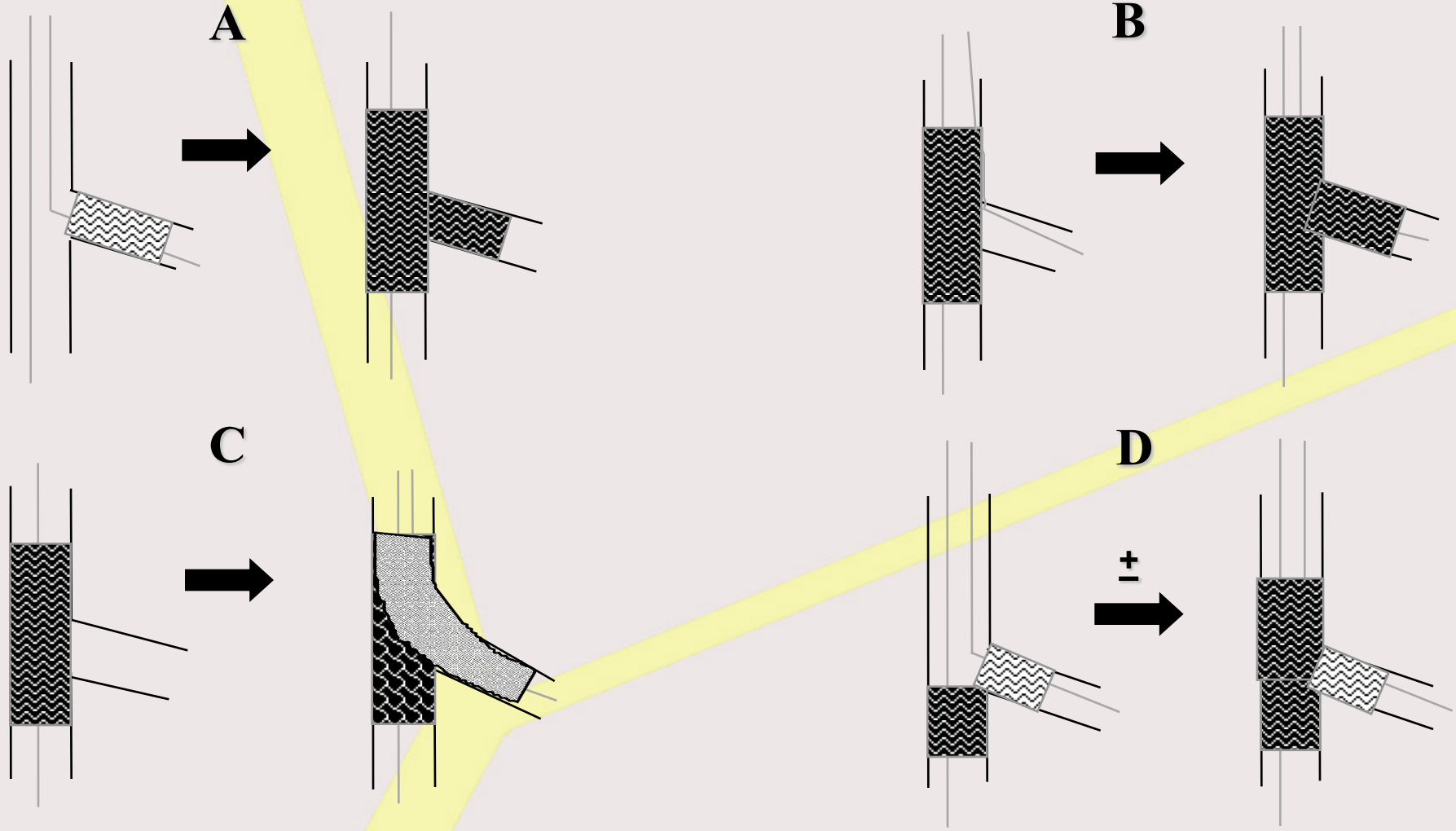
Classification of Treatments



High Tech meeting 1997

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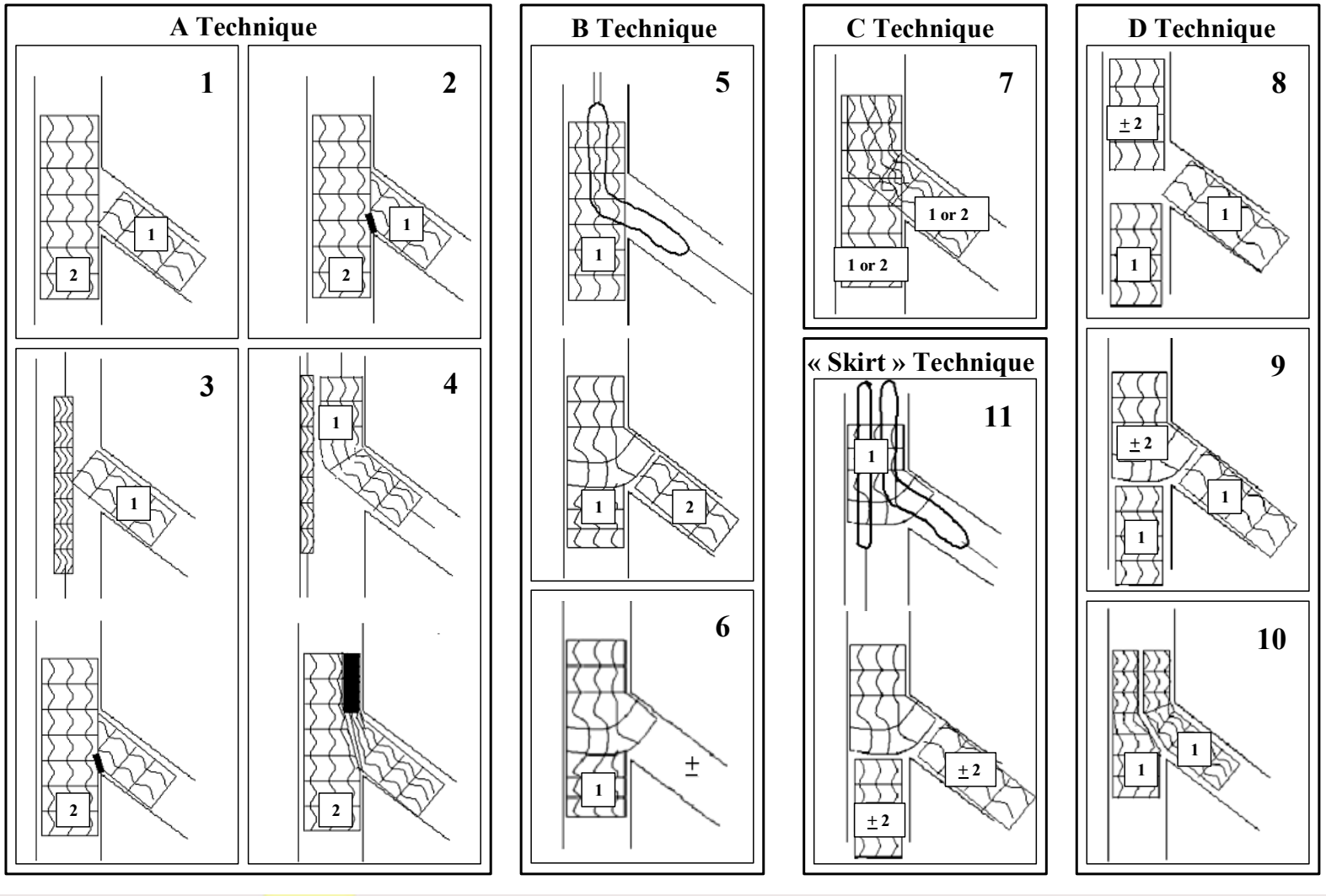
Classification of Treatments



Y. Louvard, Heart 2004; 90 :713 -722

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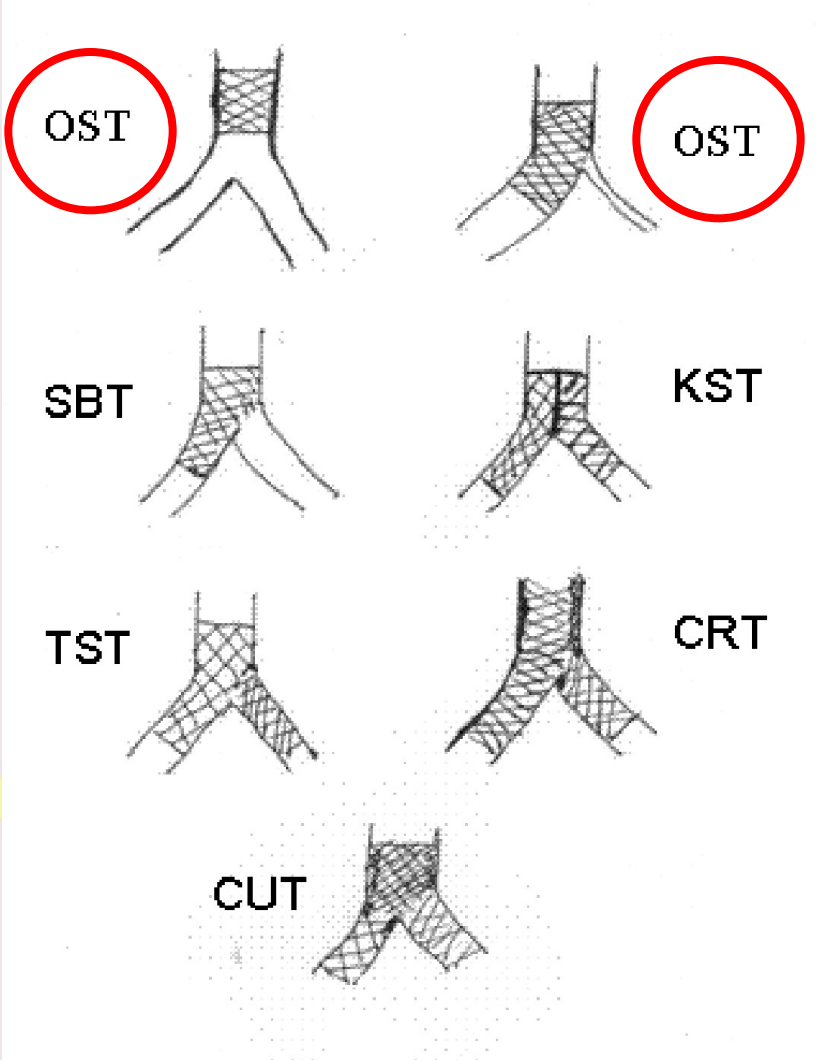
The Ideal Classification

- ~~Exhaustive: Open~~
- Simple:
  - Letters + digits ?
  - Visual

Simple ?

Schematic description of interventional bifurcation techniques:

OST = one stent technique;
SBT = stent with balloon technique;
KST= kissing stent technique;
TST = "T" stenting technique;
CRT = crush stenting technique;
CUT = culotte stenting technique



Movahed. J Invasive Cardiol. 2006 May;18(5):199-204

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The Ideal Classification

- Open
- Simple:
  - Visual
  - Families

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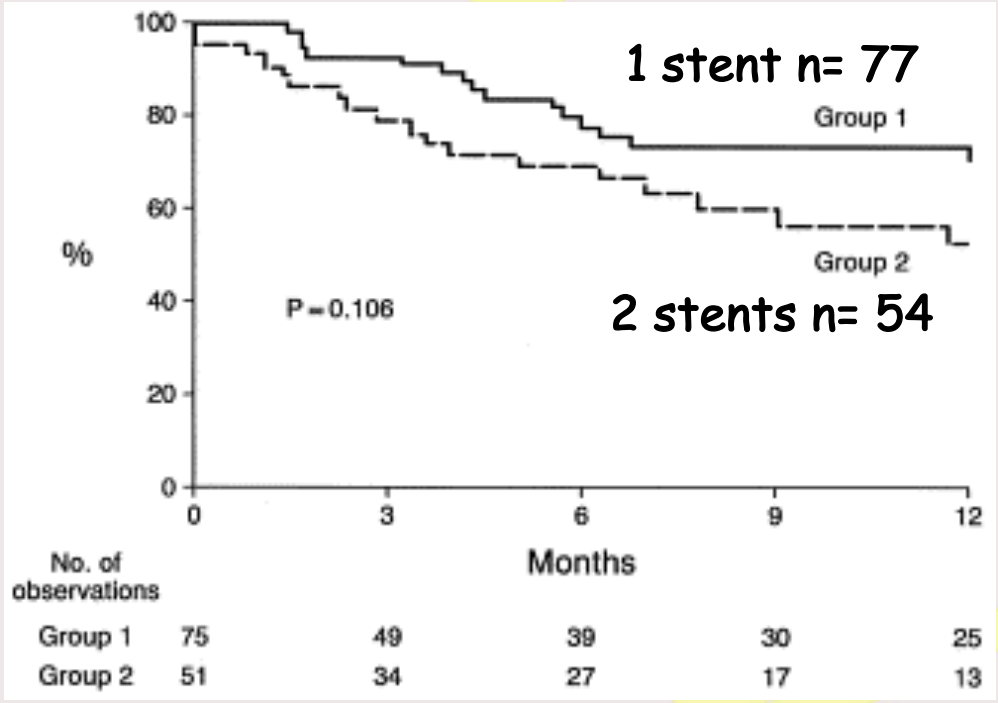
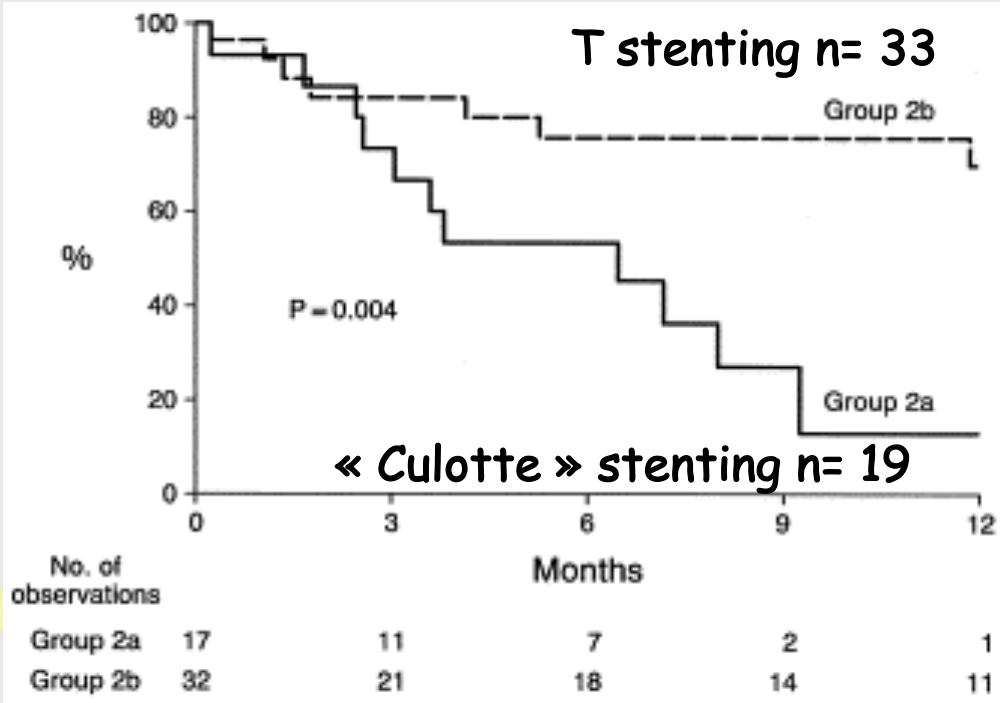
Family Classification

- Number of stents ?
- Final aspect of the stented segment ?
- Strategy ?

The Technique Matters more than the Number of Stent ?

Event free survival





Al Suwaidi et al. *JACC* 2000; 35, 4: 929-936

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Families

- ~~Number of stents~~ ?
- Final aspect of the stented segment ?
- Strategy ?

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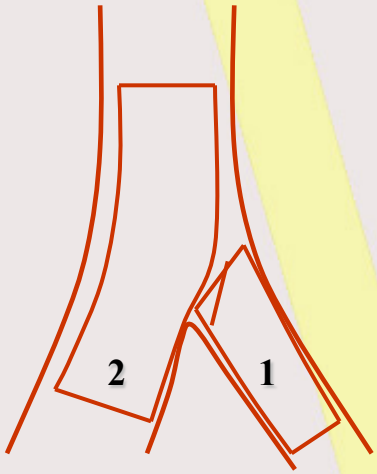
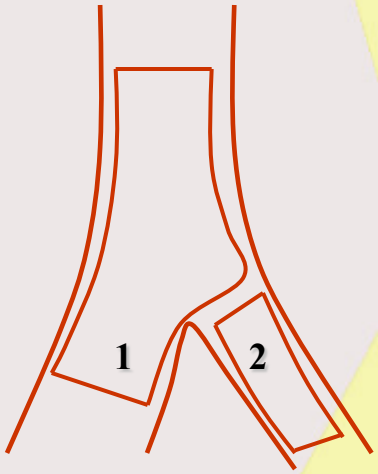
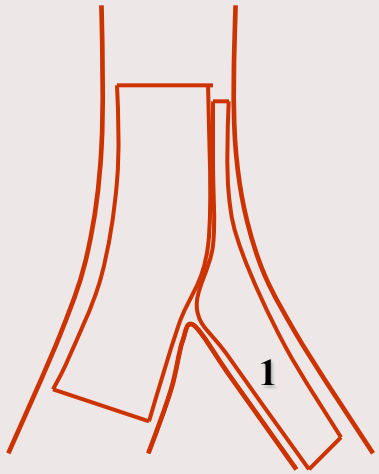
Final aspect of stent(s) ?

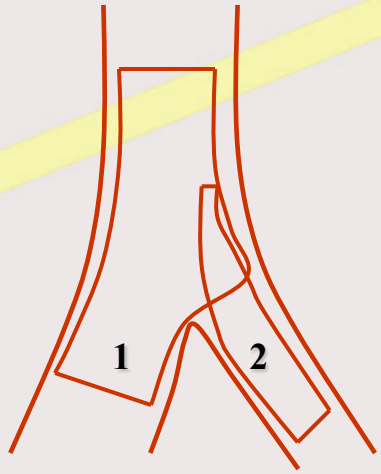
T stenting



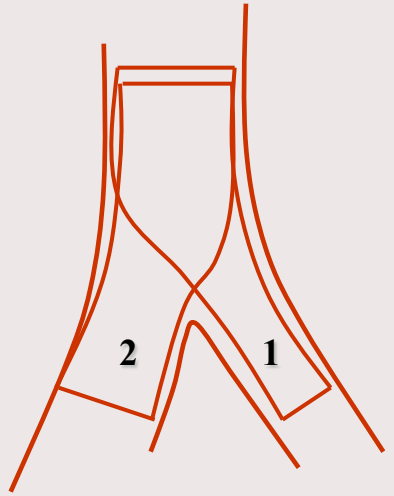


Crush technique





Culotte



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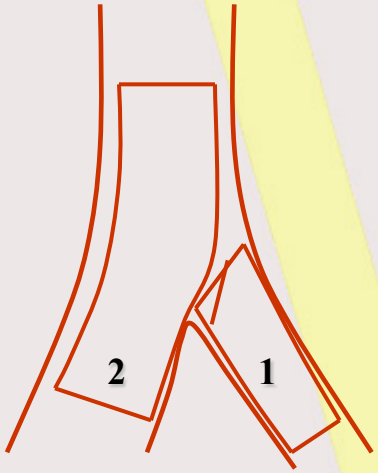
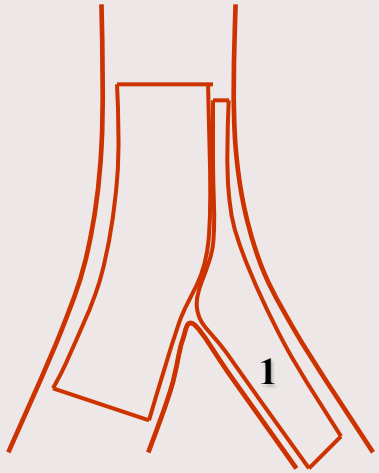
Final aspect of stent(s) ?

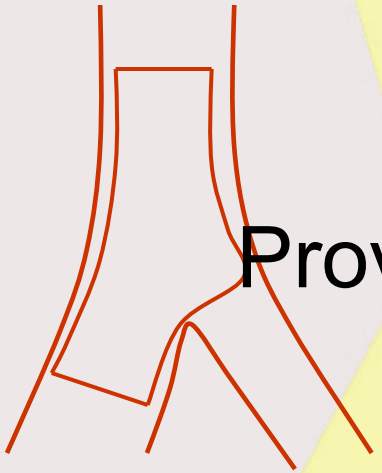
T stenting

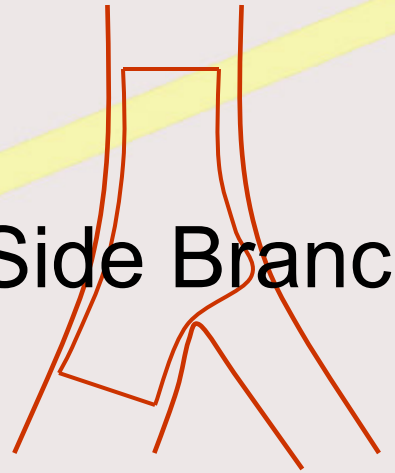


Crush technique



Culotte





Provisional Side Branch stenting

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Families

- ~~Number of stents~~ ?
- ~~Final aspect of the stented segment~~ ?
- Strategy ?

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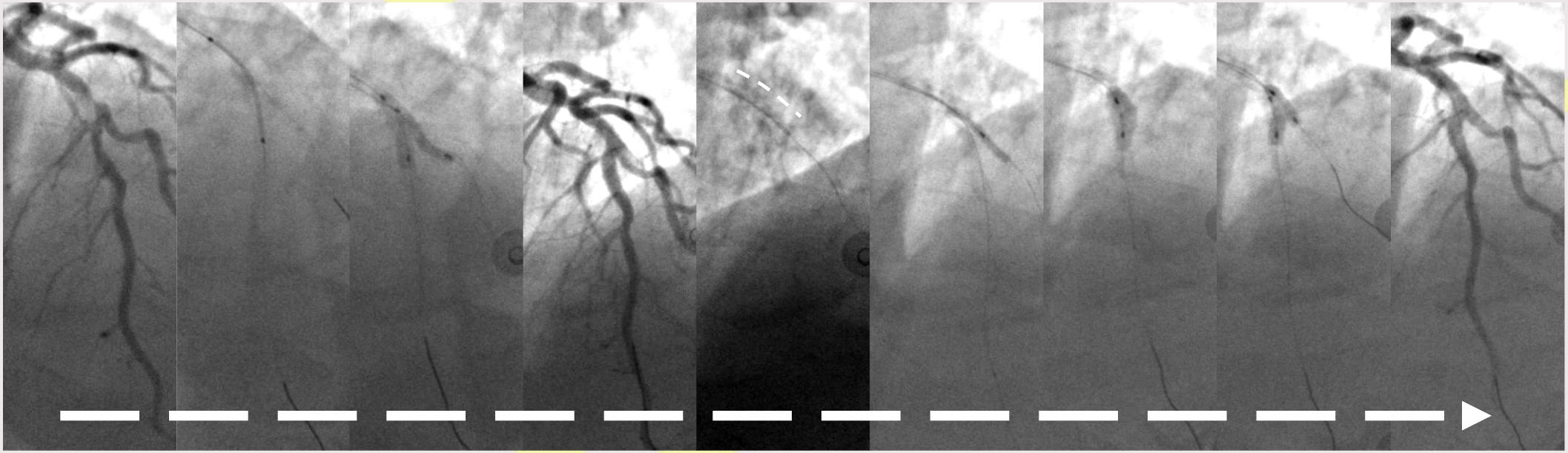
Strategy Based Classification

Intention to treat: Provisional T stenting

1,0,0 calcified | Kissing | Loss stent | Crush | Final result



Stent MB | SB dissection | Solutions: Culotte ? Crush ? | Kissing

→ Strategy / Event based classification

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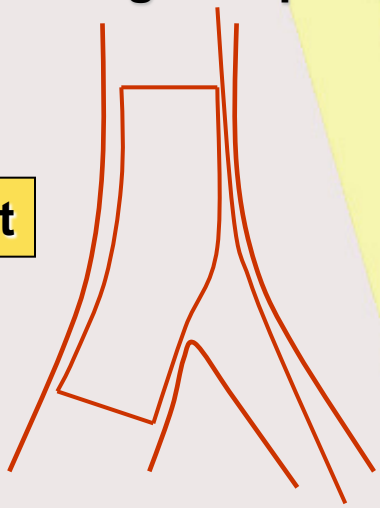
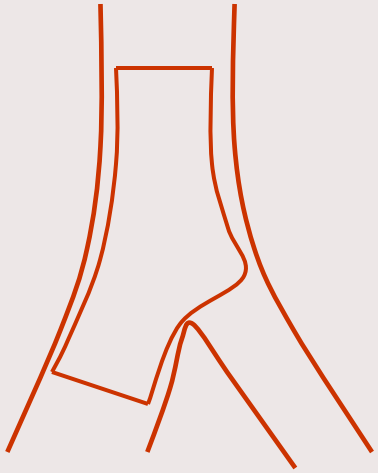
MB Stenting Accross SB First Family

MB stenting with protection

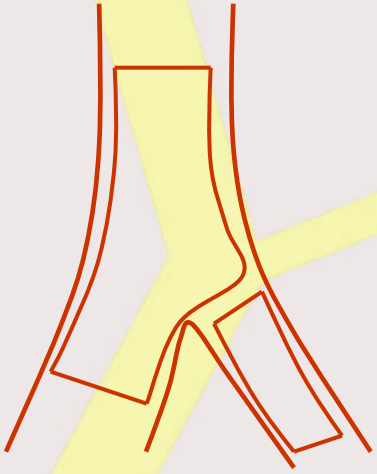


MB stenting with SB balloon

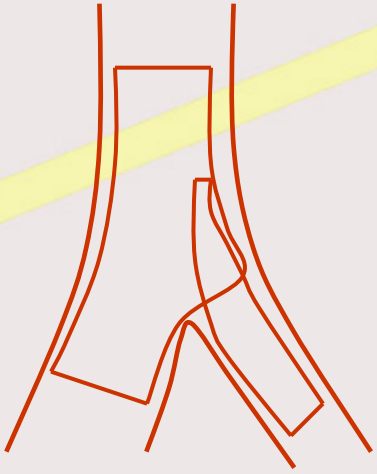


1st stent

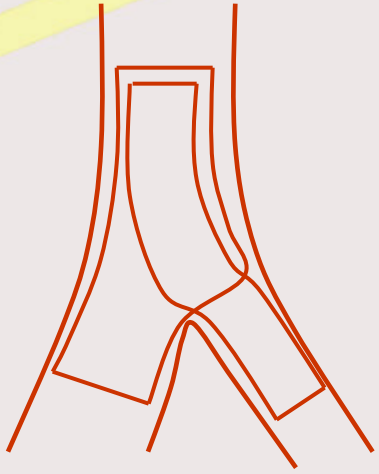
Elective T stenting



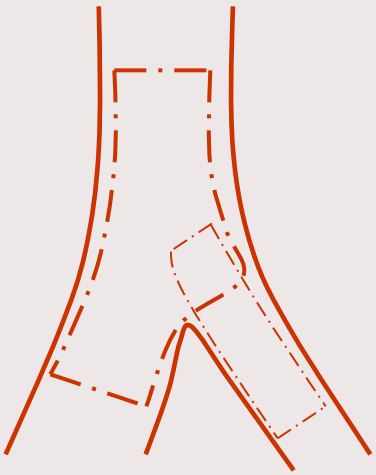
Reverse Crush



Culotte



« Buchbinder ? »



2nd stent

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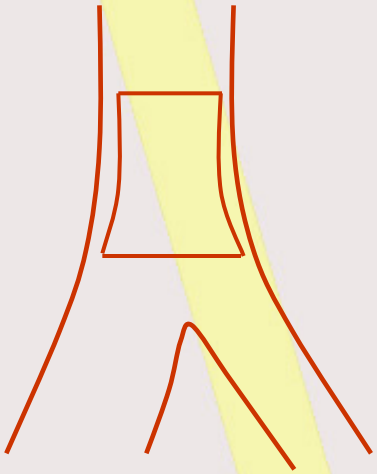
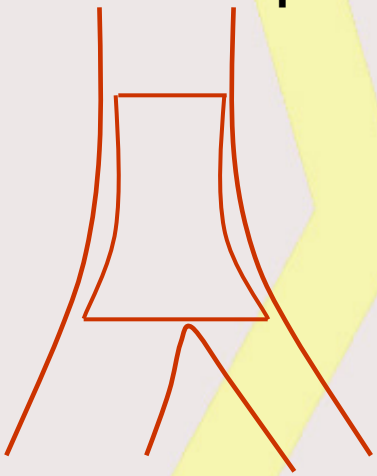
Proximal MB Stenting First Family

1st stent

Proximal MB stenting

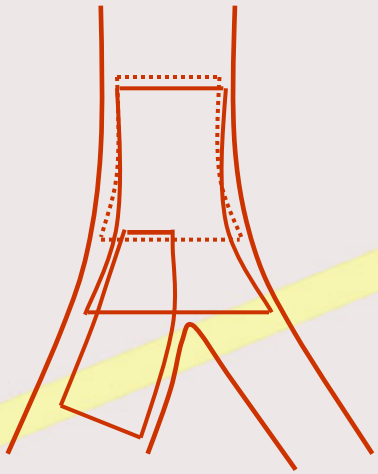


Skirt technique



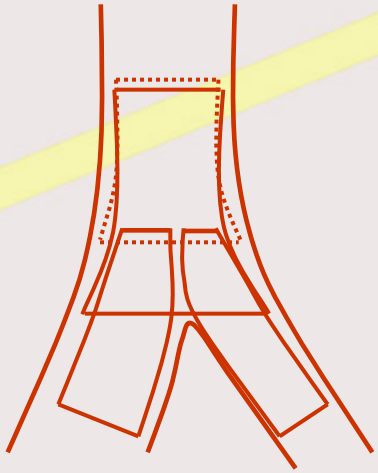
2nd stent

?



3rd stent

Helqvist



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Distal Branches Stenting First Family

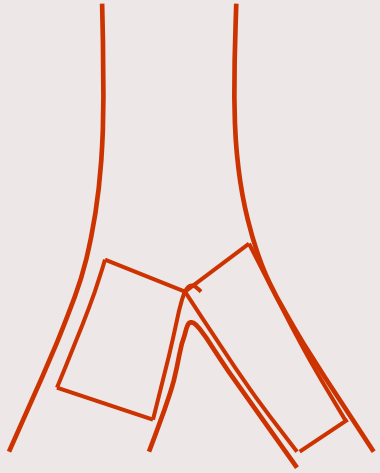
1st stent

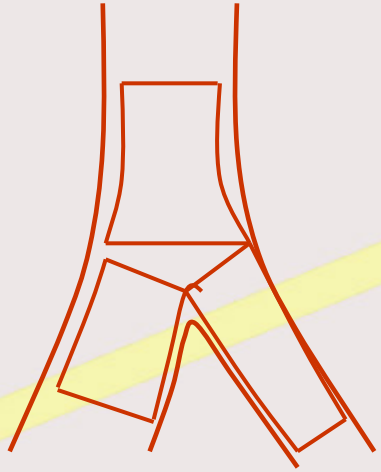
1st and 2nd stent

V stenting

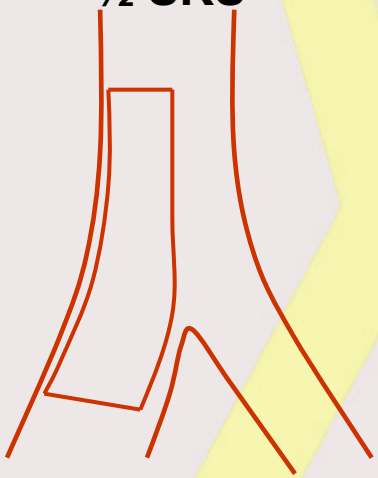
3rd stent

V + proximal stenting

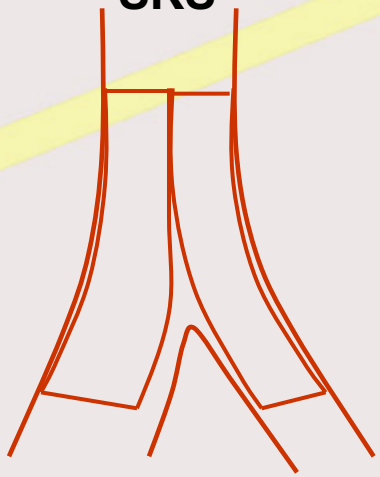




½ SKS



SKS



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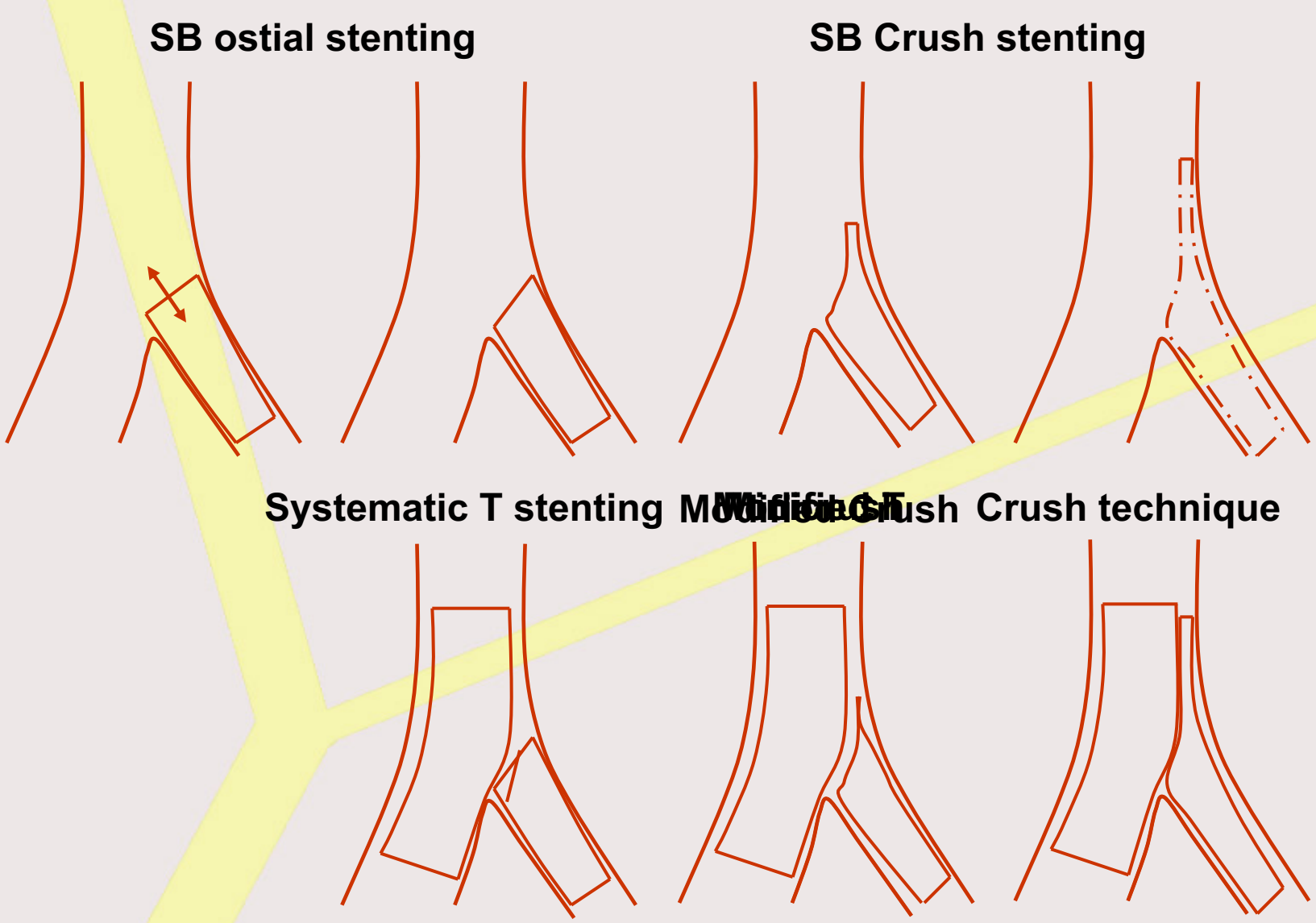
SB Stenting First Family



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Inverted Techniques (some...)

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Which Vessel is the Side Branch ?

- Nosologic definition ? : Cx, marginals, diagonals and PLA are the side branches
- Smallest ?: big to side stenting = a common specific difficulty
- Less important ? : previous MI, protected LM…

→ Operator's choice ?

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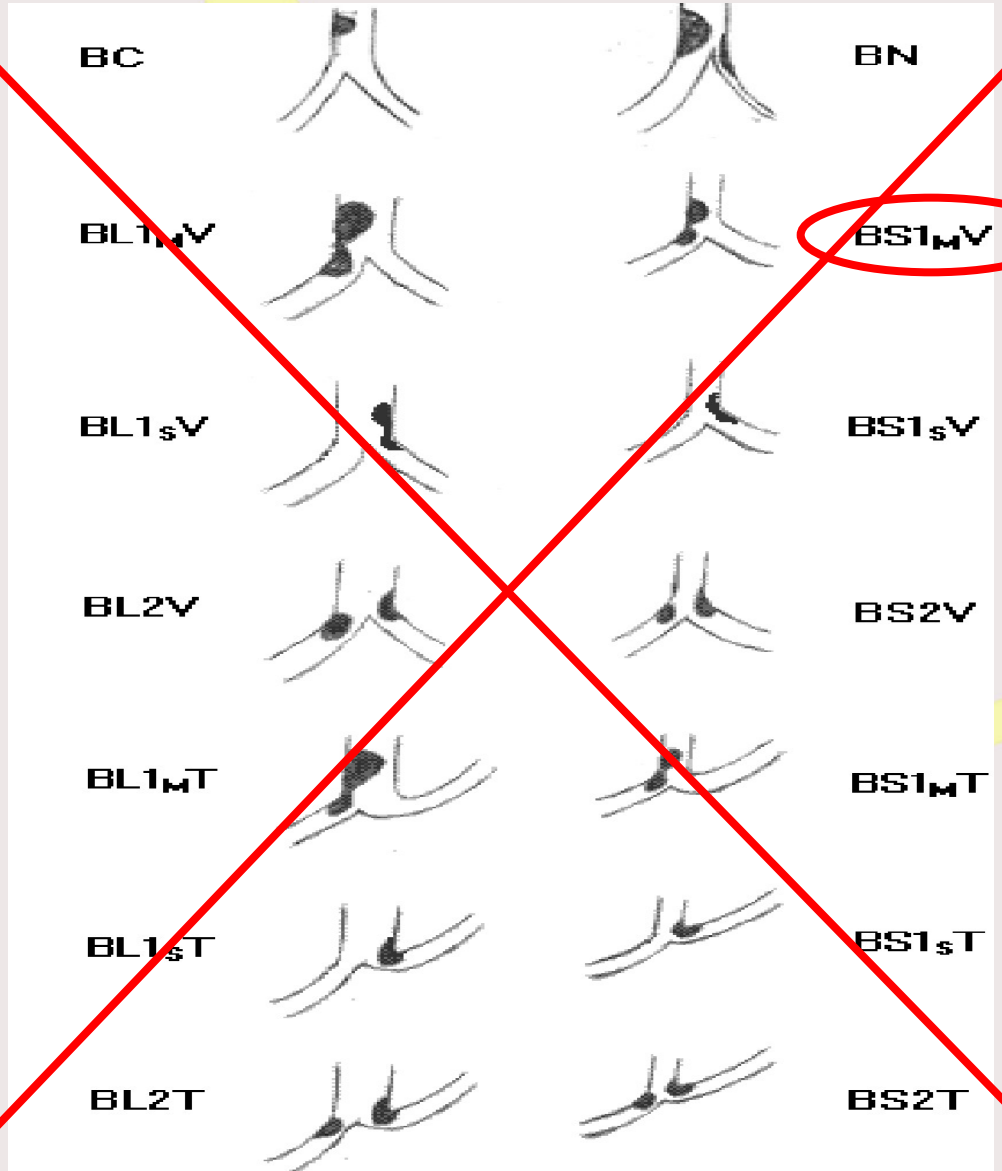
We have a simple classification of bifurcation lesions !



Movahed. A new proposed **simplified** classification of coronary artery bifurcation lesions and bifurcation interventional techniques. J Invasive Cardiol. 2006 May;18(5):199-204

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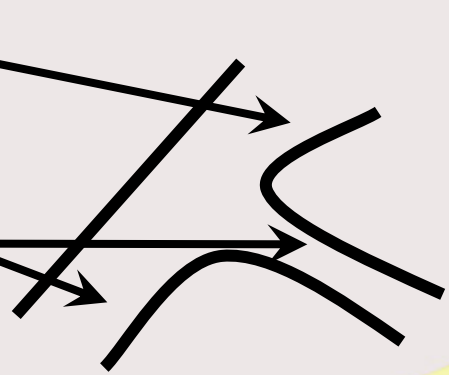
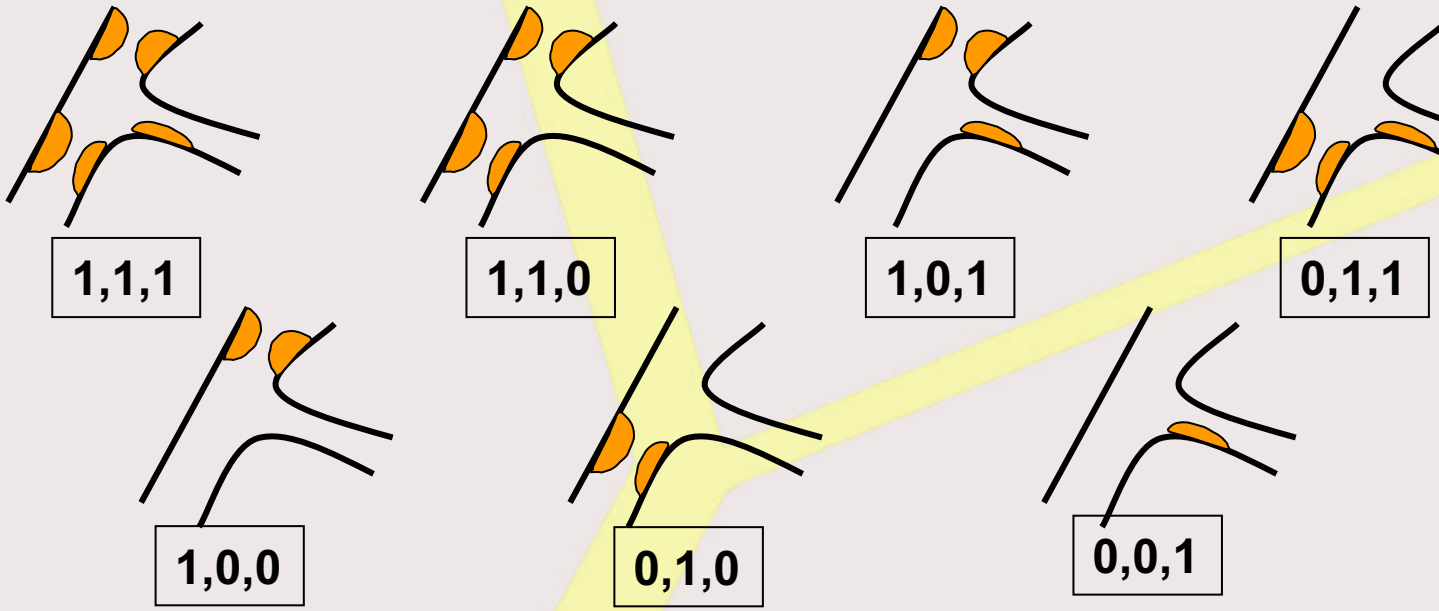
We have a simple classification of bifurcation lesions !

1. Main Branch proximal lesion > 50%: 0 or 1
2. Main Branch distal lesion > 50%: 0 or 1
3. Side Branch lesion > 50%: 0 or 1





LM-LAD/Cx

Cx1-Mg1/Cx2

RCA3-PLA/PDA…

Medina A.Rev Esp Cardiol. 2006 Feb;59(2):183

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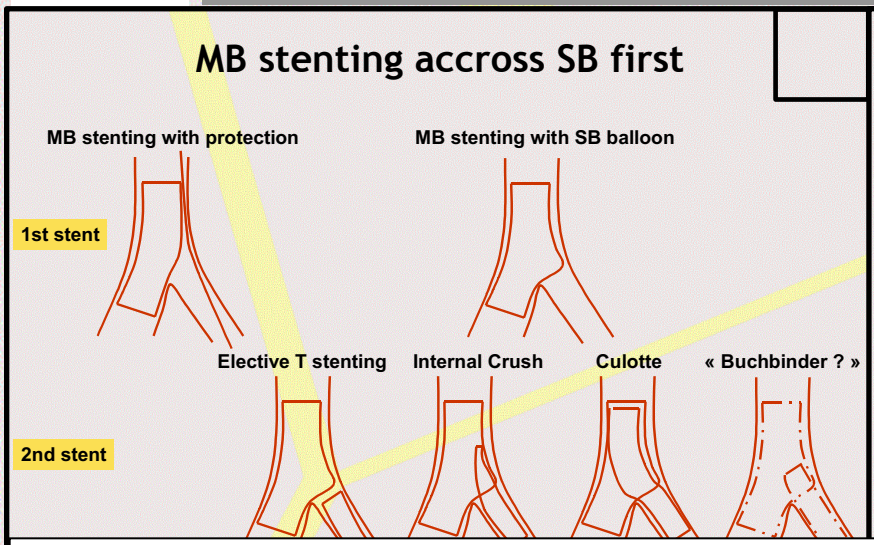
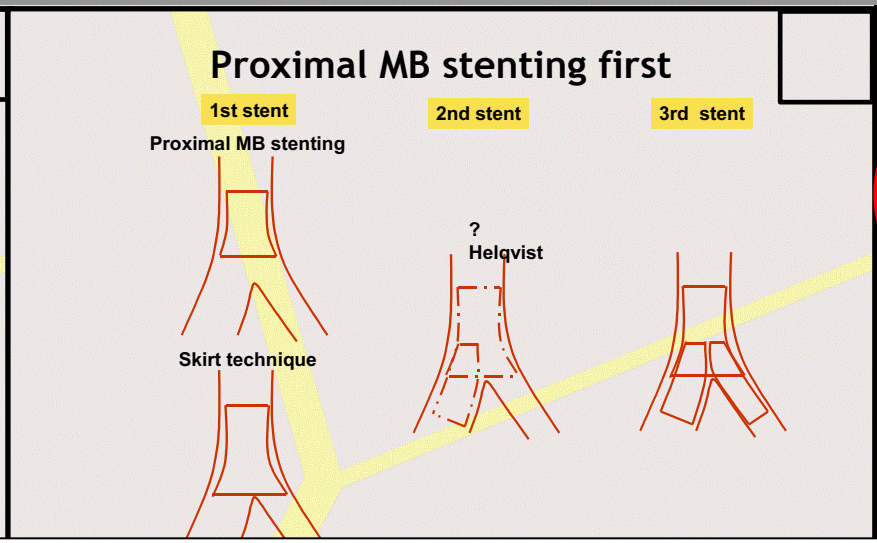
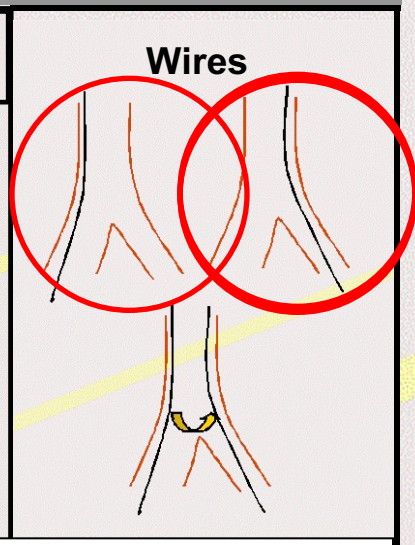
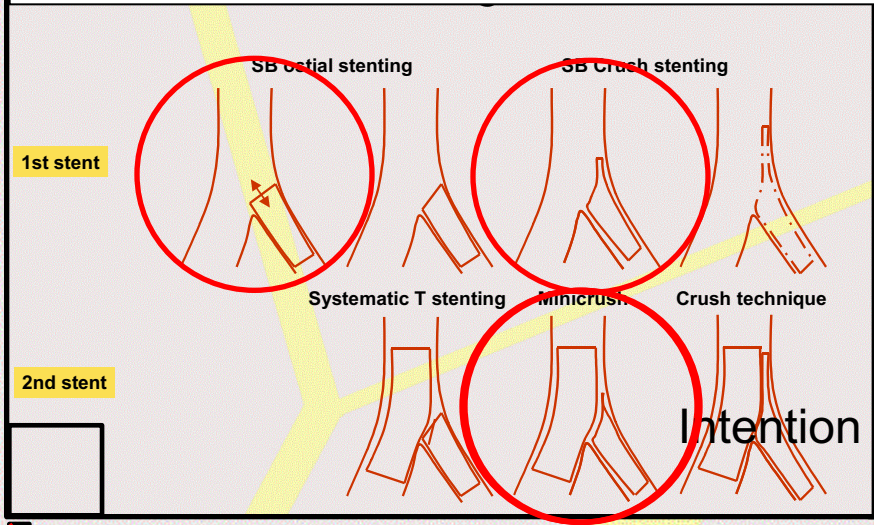
e- CRF ?

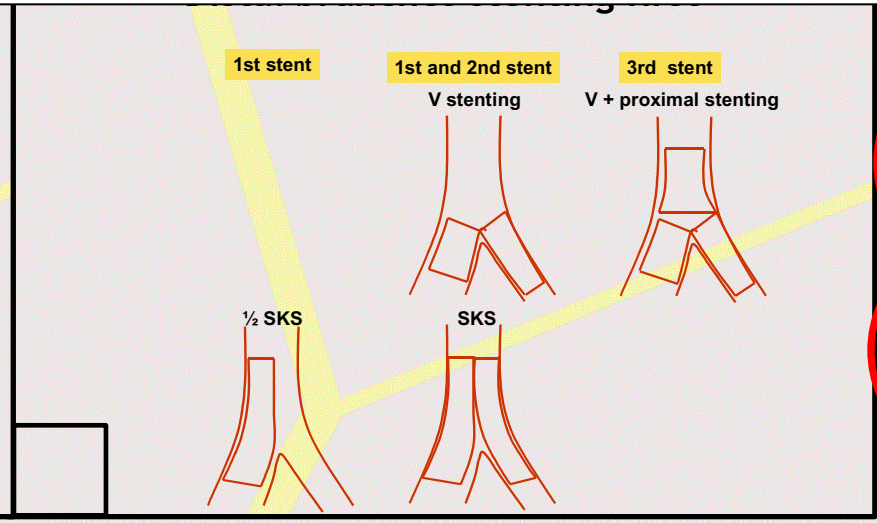


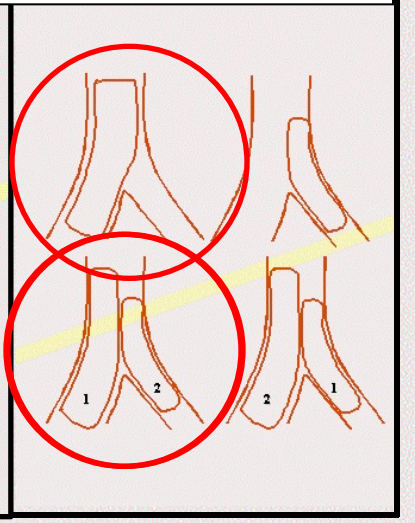




« Sleeve technique », **Jim MH**, Cathet Cardiovasc Interv 2006; 67: 403-9







Intention

☒ Inverted

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Comments ?

y.louvard@icps.com.fr