

# *Case presentation*

Dr. Mohamed Aly Abdelhafez, M.D.

*Lecturer of Cardiology  
Assiut University*

2018

## Patient data

- Male patient 58 years old
- Hypertensive
- IHD as chronic stable angina since 2 years with recent admission with acute coronary syndrome one week ago.
- RCA angiogram: **Small normal artery**

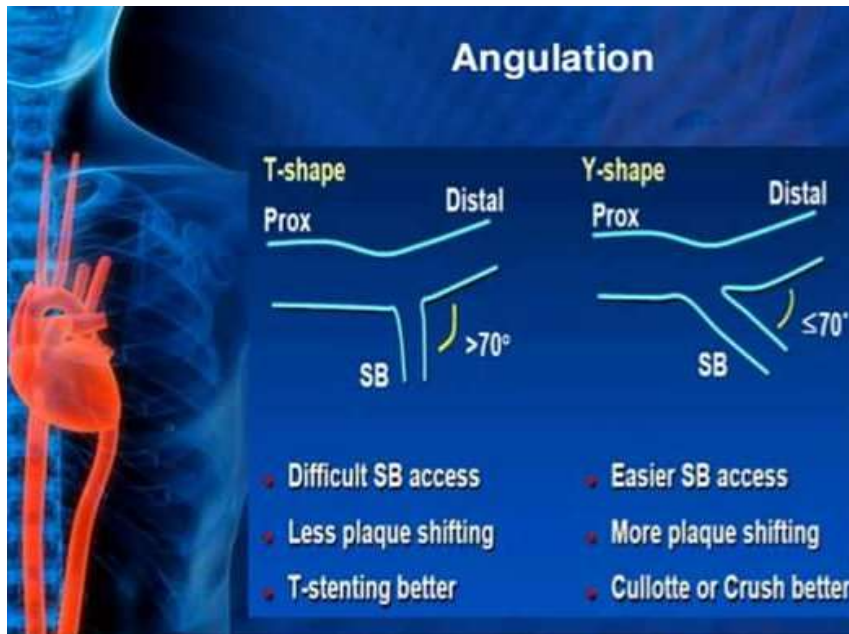
## Stenting Strategy

- Provisional SB stenting strategy
- Two stent strategy

- **KISSS principle**  
*Keep It Simple...  
Swift .....  
& Safe.....*

## Stenting Strategy

Favouring provisional	Favouring two stents
No SB lesion	1,1,1 Medina
SB diameter < 2.0 mm	SB diameter > 2.0mm
SB lesion length < 5.0mm	SB lesion length > 5.0mm
Easy SB access	Difficult SB access
SB supplying a small burden of the myocardium	SB supplying a large burden of the myocardium

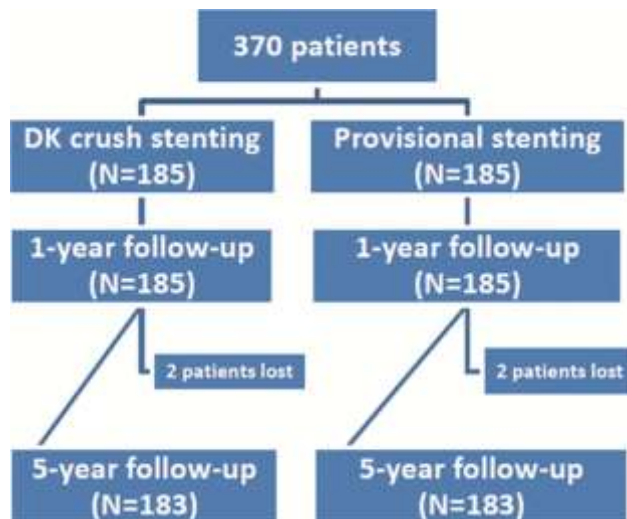


*Which technique ?*

*We decided to go for DK-CRUSH*

*Why ?*

Study flowchart of the DKCRUSH-II study (Randomized Study on Double Kissing Crush Technique Versus Provisional Stenting Technique for Coronary Artery Bifurcation Lesions).

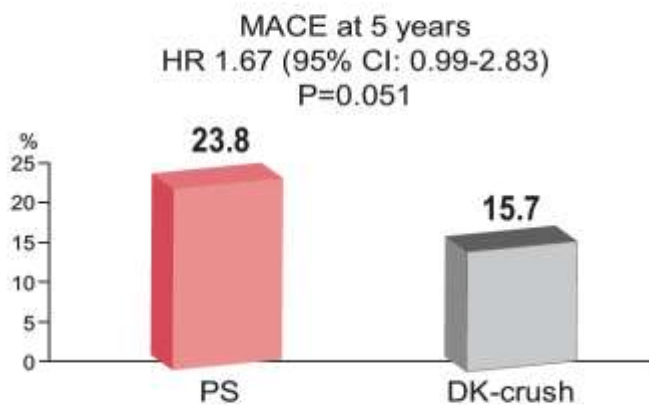


Shao-Liang Chen et al. *Circ Cardiovasc Interv.*  
2017;10:e004497



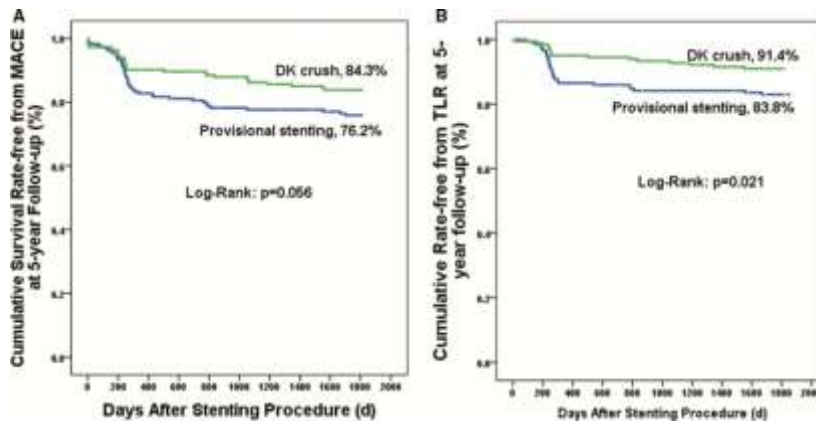
Copyright © American Heart Association, Inc. All rights reserved.

## Treatment of coronary bifurcation DKCRUSH-II 5 year



Chen et al. *Circ Cardiovasc Interv* 2017;10:e 004497

## Kaplan–Meier analysis.



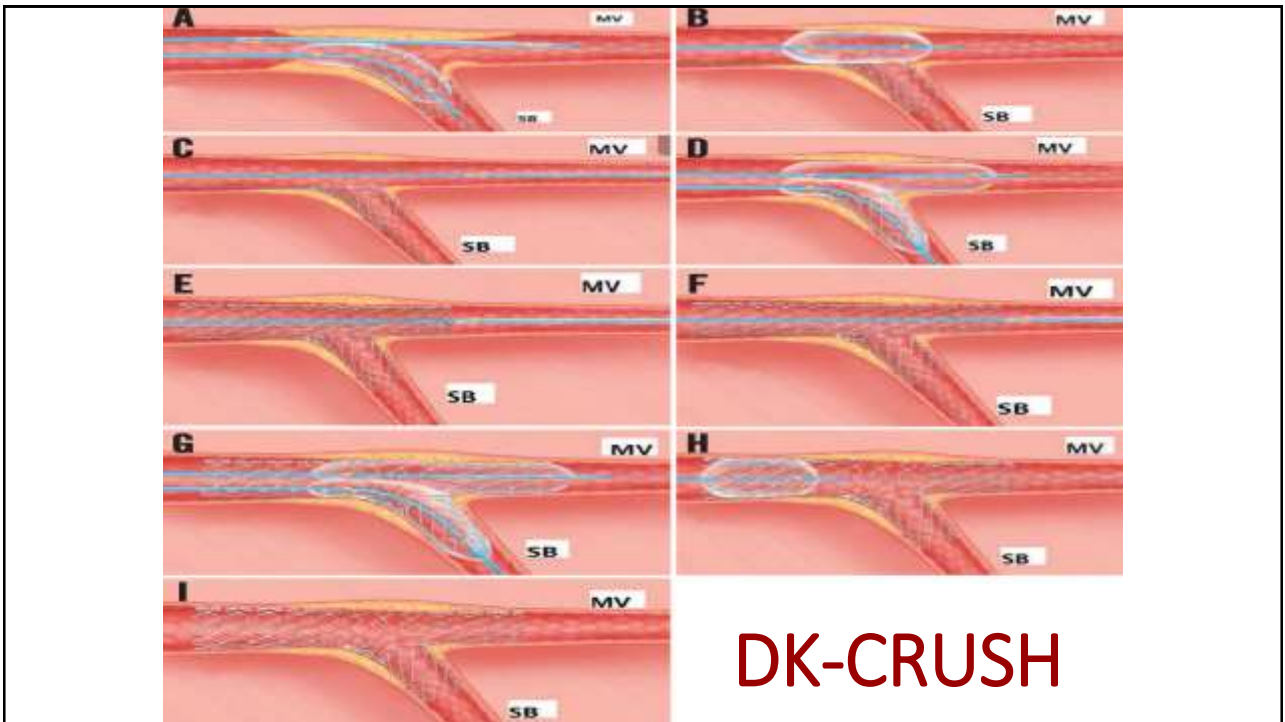
Shao-Liang Chen et al. Circ Cardiovasc Interv.  
2017;10:e004497



Copyright © American Heart Association, Inc. All rights reserved.

## “Modern” way to perform crush

- limiting the length of the crushed stent segment (**mini-crush**) during stent implantation in the SB
- the use of an MV balloon (instead of directly implanting the MV stent) to crush the SB stent (**step-crush**)
- the performance of a **first kissing balloon** inflation after stent crush in order to push away the first layer of stent struts from the SB orifice and fully appose the struts on the carina side



## PCI procedure

- XB 3.5 (7 F) was used as the guiding catheter
- Two Asahi soft wires were used.
- Balloons:
  - Two Maverick 2.0 x 20mm & 2.5 x 20mm
  - Two Maverick NC 2.75 x 15 mm balloons

## Take Home Message

- Provisional side branch stenting is effective for the majority of coronary artery bifurcation lesions.
- For bifurcation lesions with small SB (usually <2.0 mm in diameter), keep it open is recommended.
- It is important to address the value of the proximal optimization technique after FKBI to improve immediate and 1-year results so, the routine use of the proximal optimization technique should be recommend.
- The benefits of double kissing crush stenting for true coronary bifurcation lesions were sustained through 5-year follow-up.
- Patients receiving the second stent as a bailout had worse survival free from MACE than those who received it as a planned technique.



*Thank you*