# Compression of the Ostia of the Side-branch Coronary Arteries by Different Types of Main-branch Plaques

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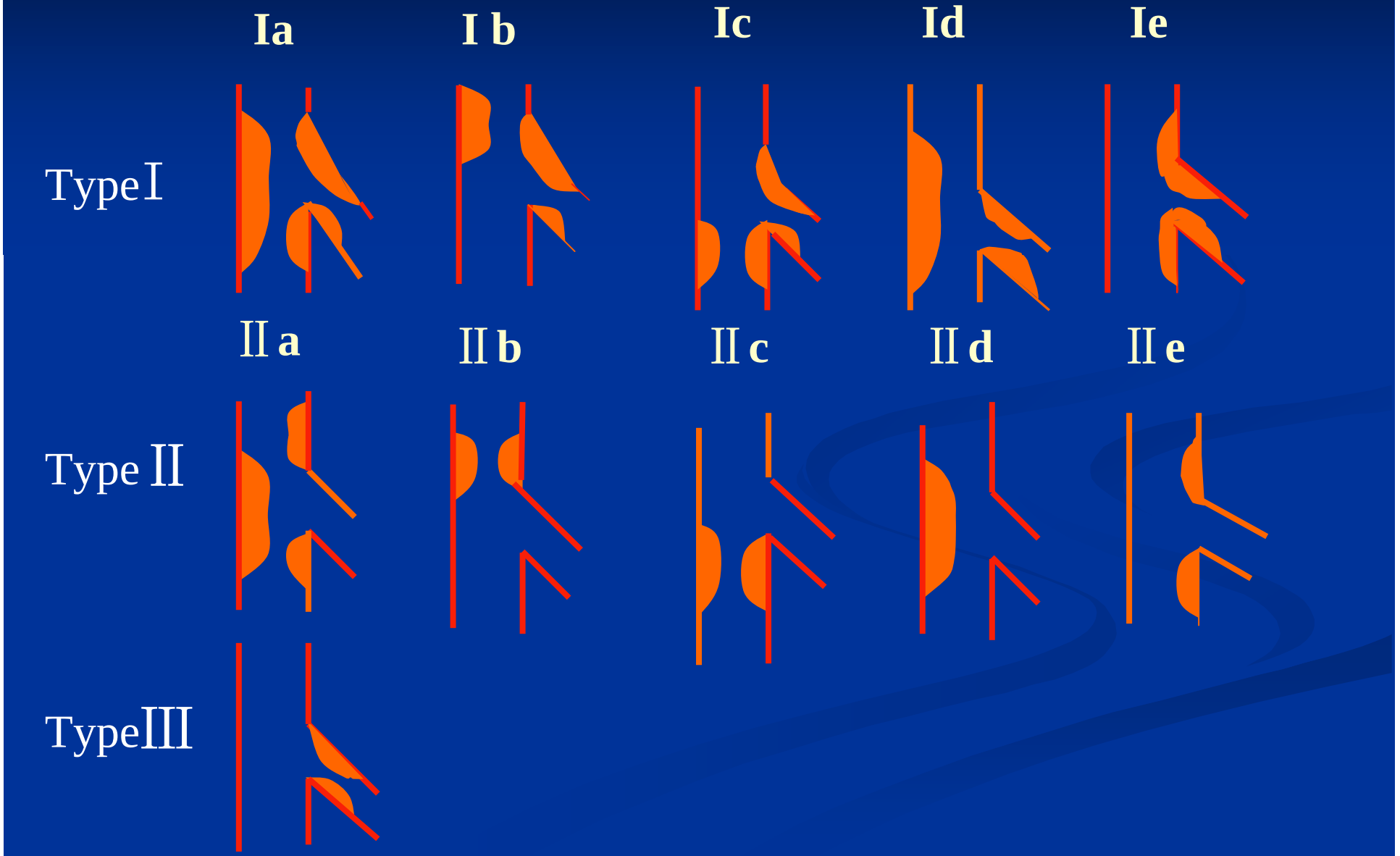
# Chen's classification for bifurcation lesions



# Frequency for subtypes of bifurcation lesions （n＝300）

| Subtypes | a | b | c | d | e | Total |
|---|---|---|---|---|---|---|
| I（%） | 31.3 | 9.0 | 17.7 | 4.7 | 1.3 | 63.8 |
| II（%） | 8.3 | 6.3 | 11.3 | 4.0 | 0.7 | 30.5 |
| III（%） | 5.7 | | | | | 5.7 |

# Objectives

To explore the best route and treatment

Strategy for bifurcation lesions in

coronary heart disease patients

135 patients with type Ⅱ bifur.L who received a single DES in main vessel (MV) were selected in this study.

Including:

LAD/Diag.bifurcation lesions in 86 cases

LM distal bifurcations lesions in 49 cases

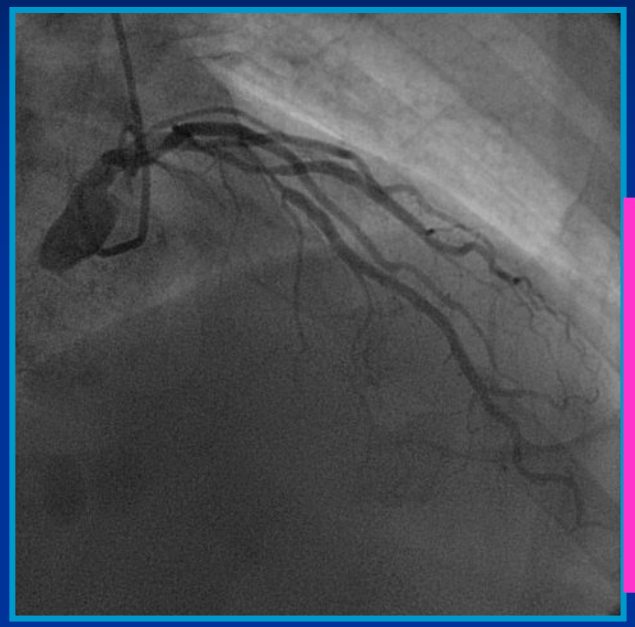
# Compression of the side-branch ostium after placement of the main-branch stent in type II bifurcation lesions

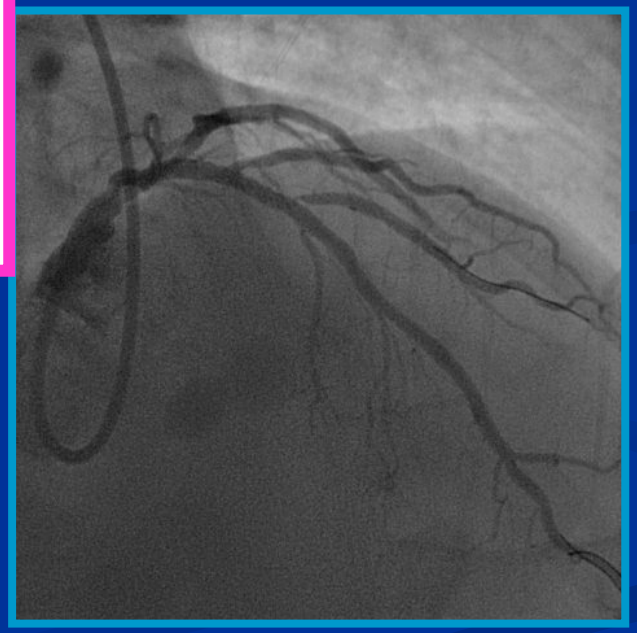
| % | a | b | c | d |
|---|---|---|---|---|
| Number of cases | 42 | 22 | 58 | 12 |
| MV stenosis before stenting | 85.48±5.54 | 85.45±7.52 | 84.64±7.73 | 84.58±7.20 |
| Increased stenosis of the SB ostium after stenting in MV | 48.74±20.50 | 36.36±18.71 | 40.55±19.63 | 24.00±11.56 |

Note: The differences between the groups were significant ($P<0.001$)

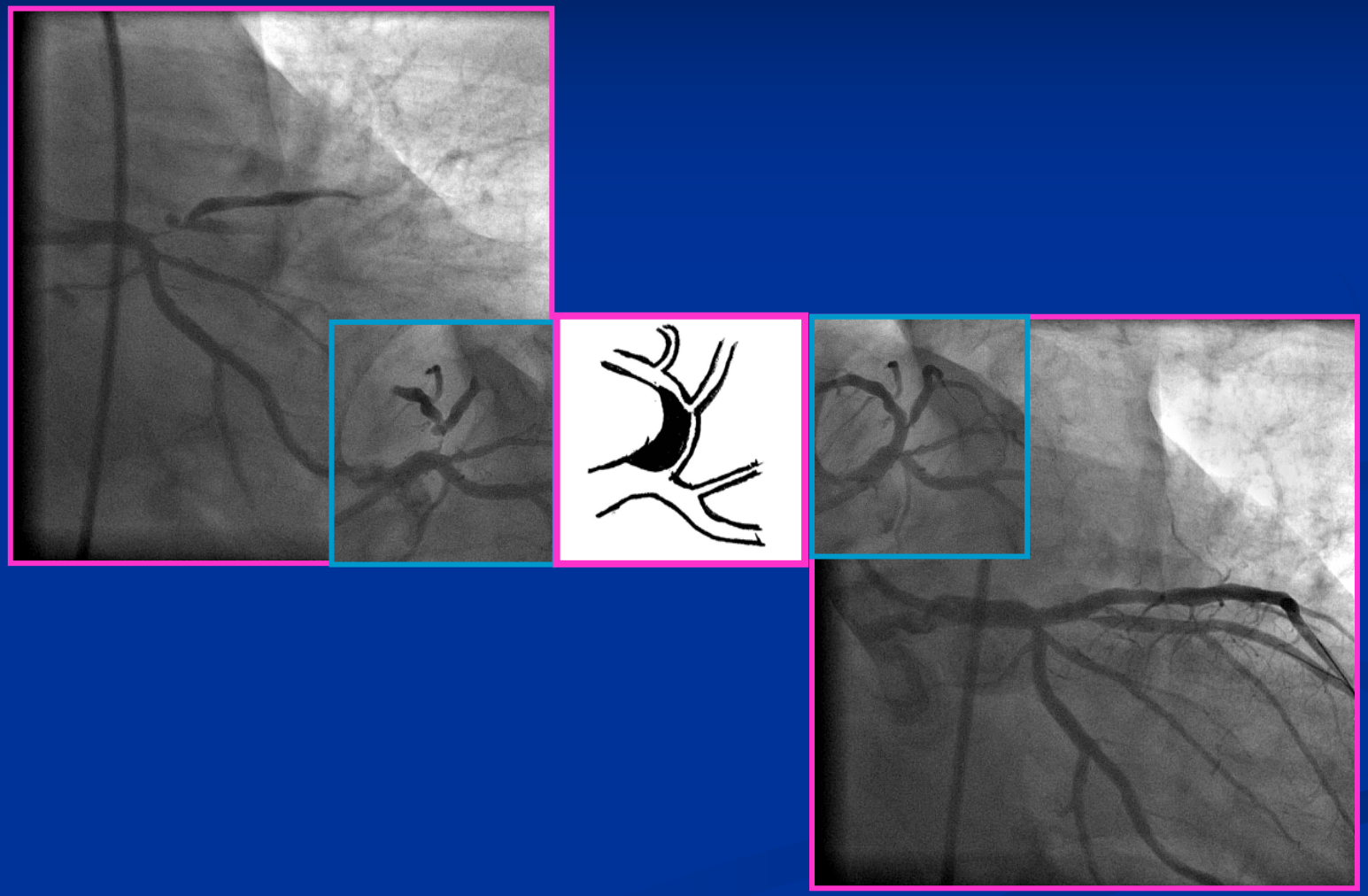
The incidence of acute occlusion in side branch is 1.5%

# Compression of the Ostia SB in Type Ⅱa lesions

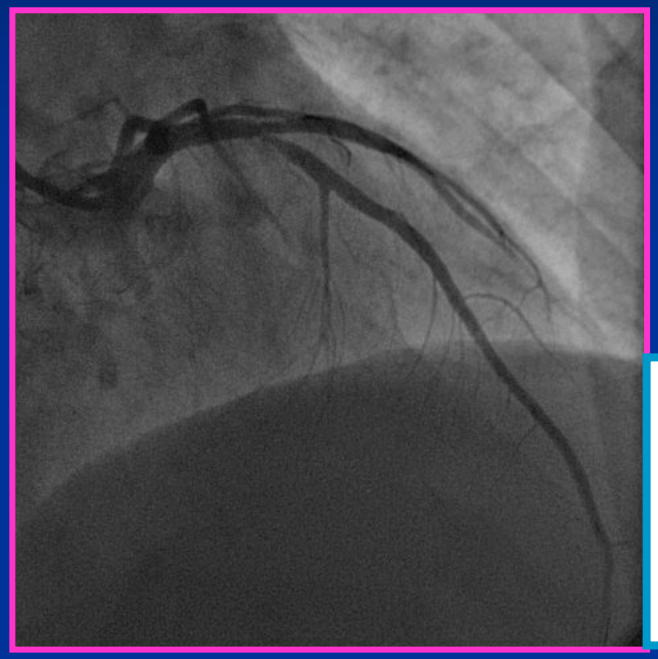


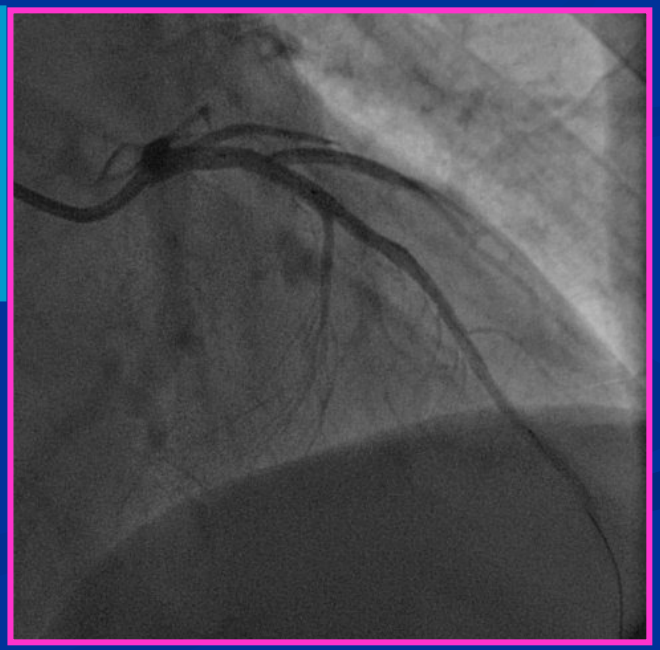


# Compression of the Ostia SB in Type II b lesions

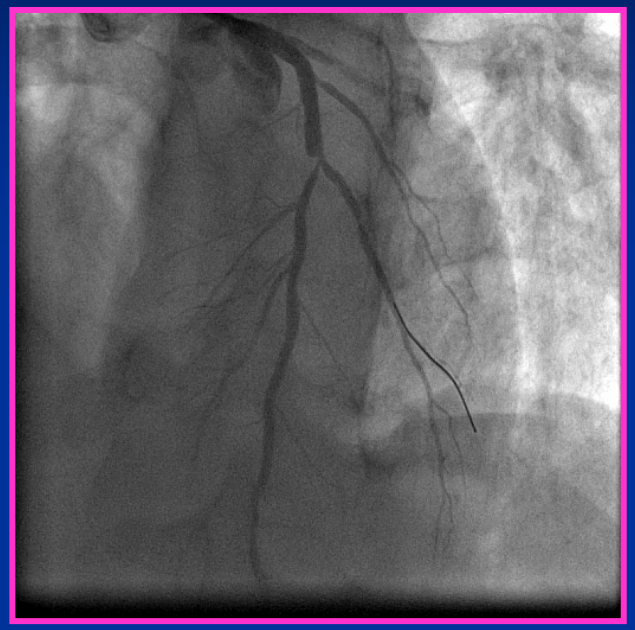


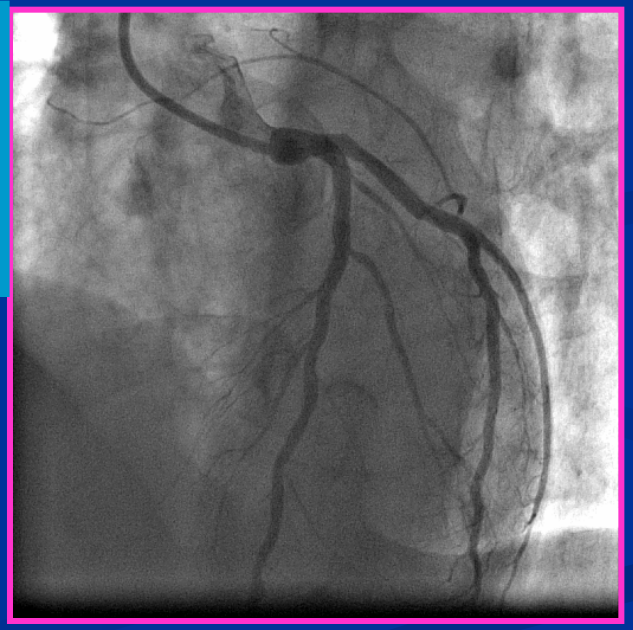
# Compression of the Ostia SB in Type Ⅱc lesion



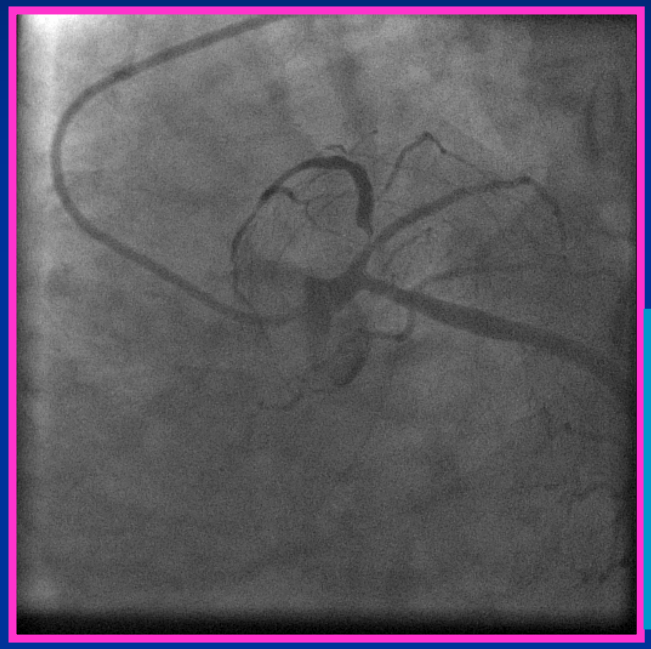


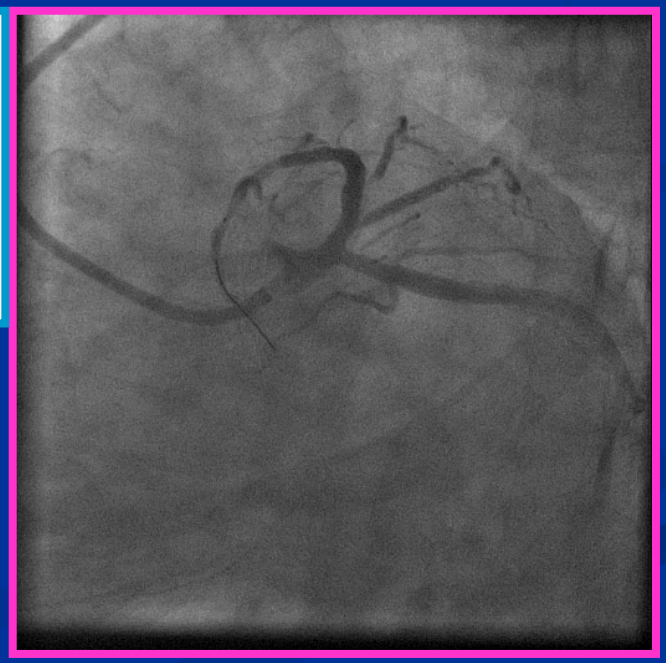
# Compression of the Ostia SB in Type Ⅱd lesions



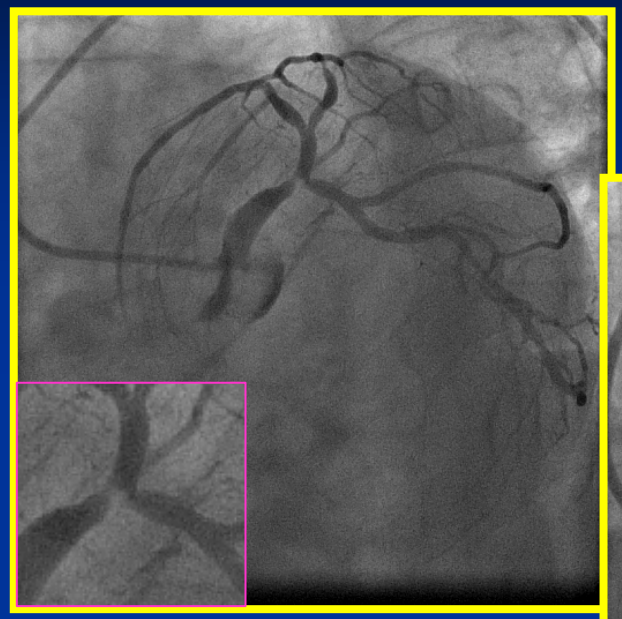


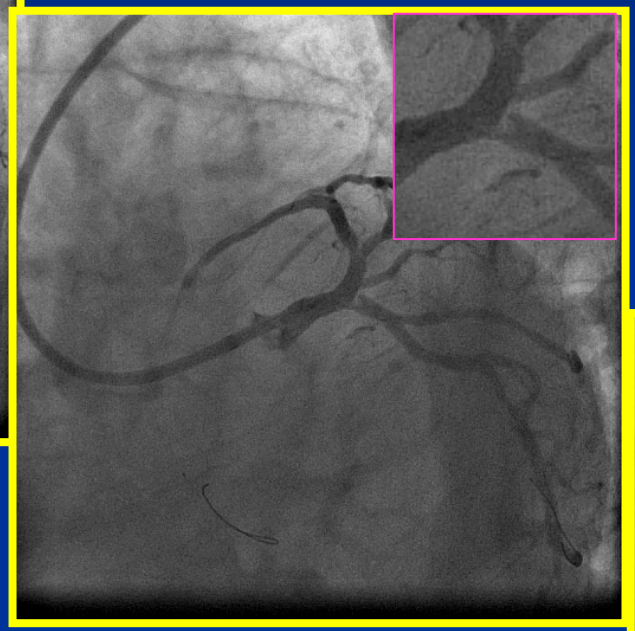
# Compression of the Ostia SB in Type Ⅱd lesions

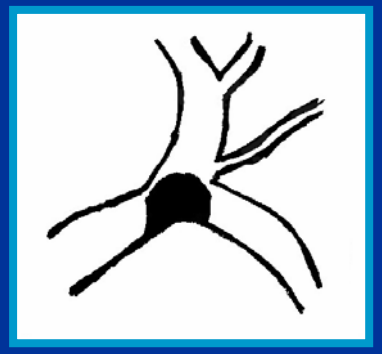




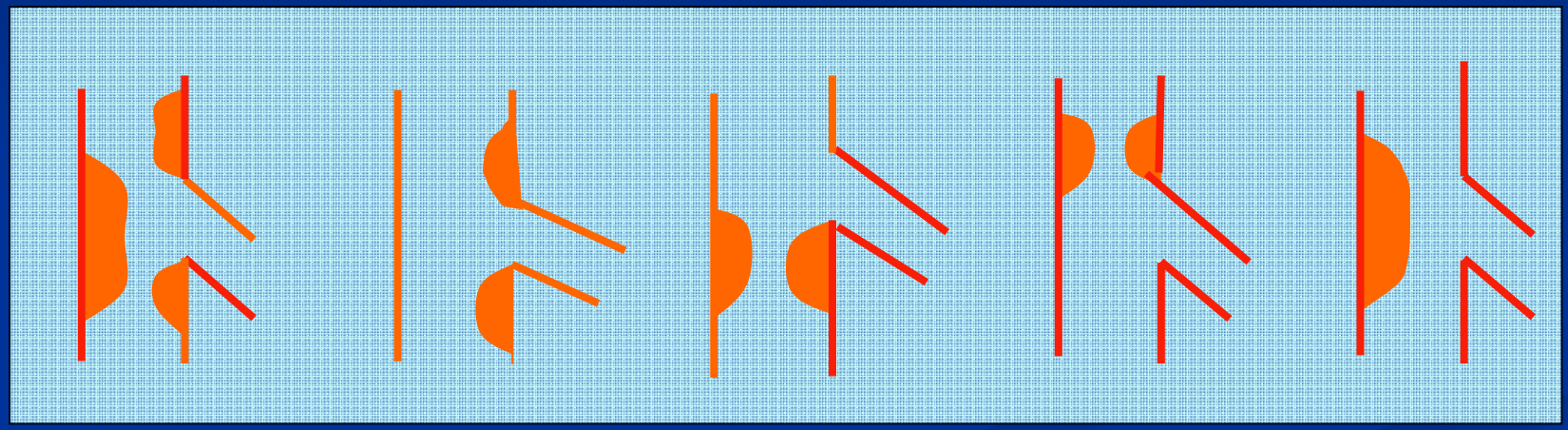
# Compression of the Ostia SB Type Ie







# IIa > IIe > IIc > IIb > IId



48.74±20.50

47.00±0.00

40.55±19.63

36.36±18.71

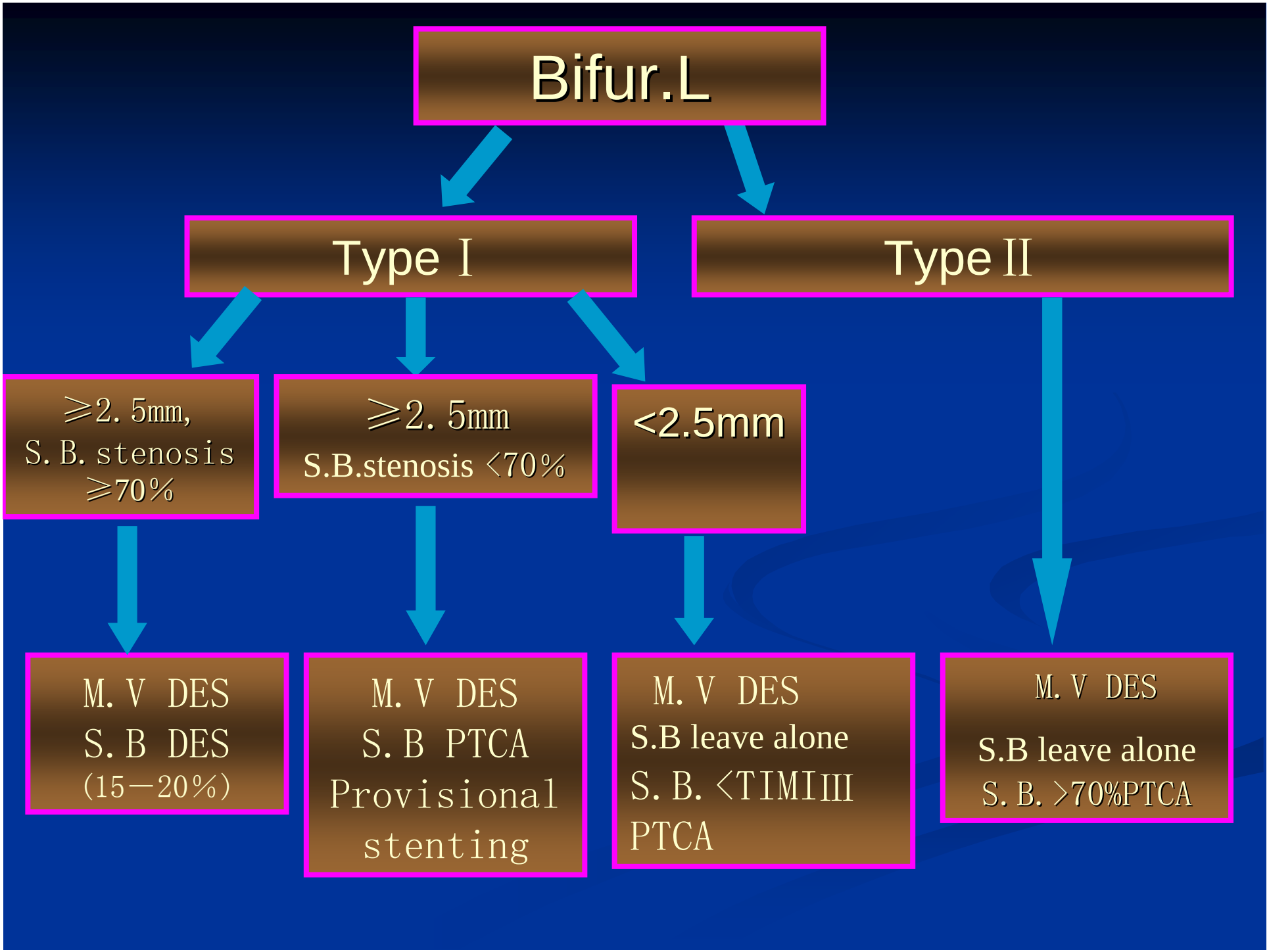
24.00±11.56

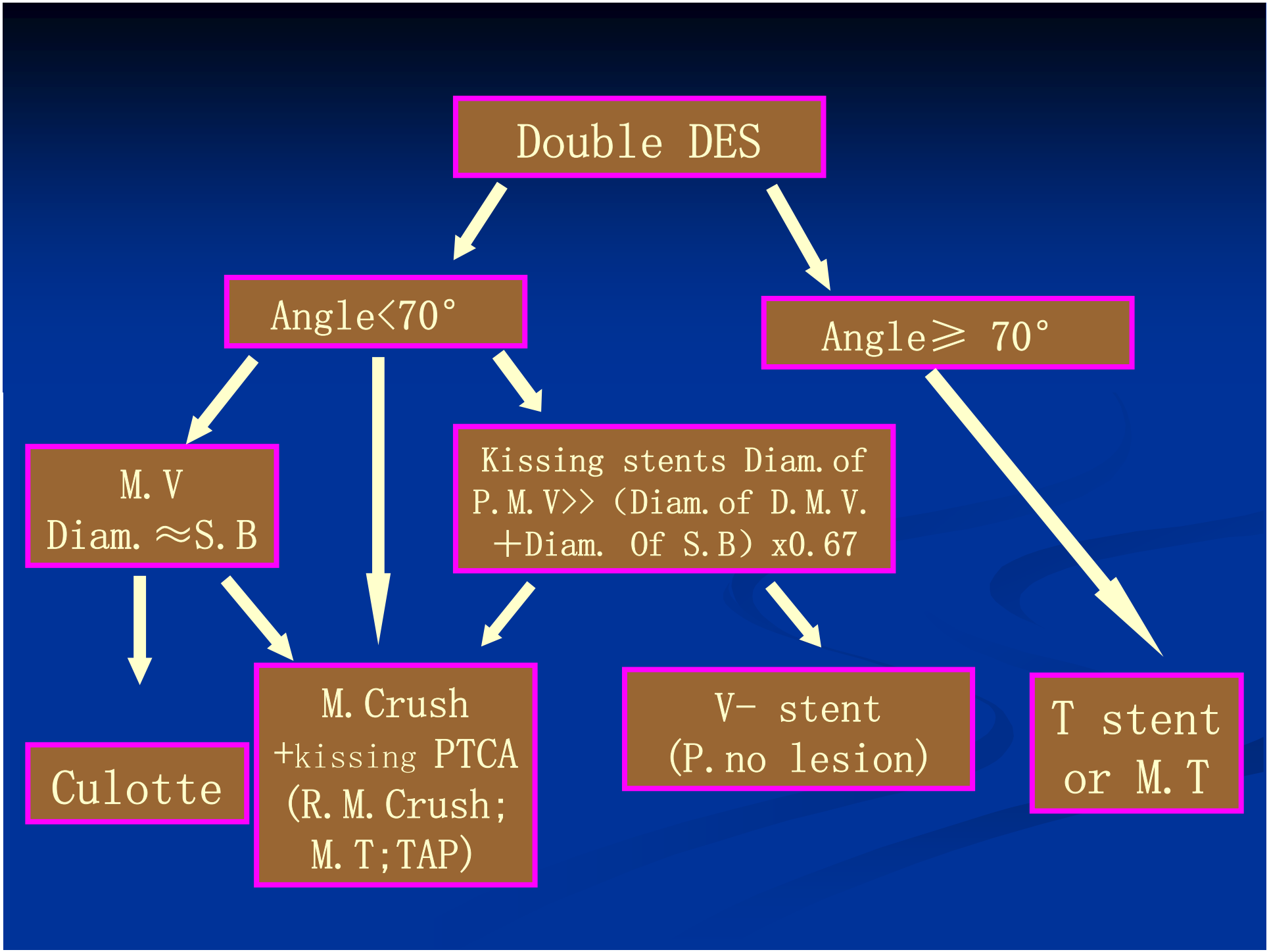
**Two key points about treatment strategy for bifur. L**

1. Ostium of side branch is severe stenosis (≥50%)

   or not?

2. Diam. Of side branch is ≥2.5mm or <2.5mm


Bifur.L
Type Ⅰ
Type Ⅱ
≥2.5mm, S.B. stenosis ≥70%
≥2.5mm S.B.stenosis <70%
<2.5mm
M.V DES S.B DES (15—20%)
M.V DES S.B PTCA Provisional stenting
M.V DES S.B leave alone S.B.<TIMIⅢ PTCA
M.V DES S.B leave alone S.B.>70%PTCA


Double DES
Angle<70°
Angle≥ 70°
M.V
Diam.≈S.B
Kissing stents Diam.of
P.M.V>> (Diam.of D.M.V.
+Diam. Of S.B) x0.67
Culotte
M.Crush
+kissing PTCA
(R.M.Crush;
M.T;TAP)
V- stent
(P.no lesion)
T stent
or M.T