

# Stent in osteal ramus intemedus Interrupts LAD flow

By

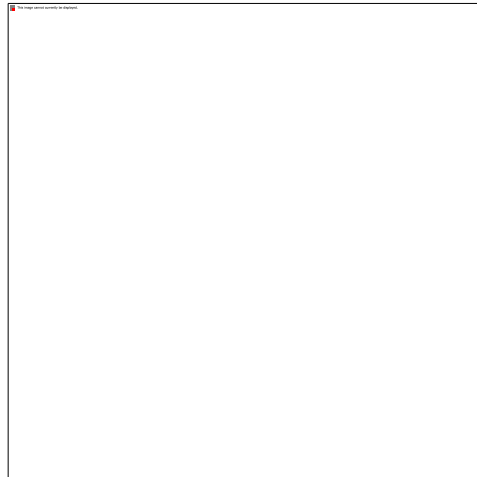
Aysar Abdel Aziz

Ass.prof military medical academy

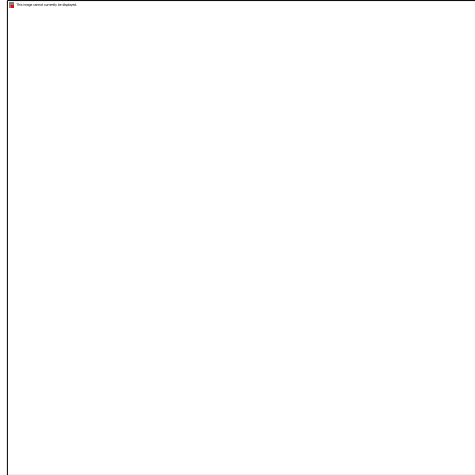
- 57years ,patient,bank manager,non smoker
- Hypertensive,Not diabetetic,dyslipidemic
- Positive family history IHD
- Presented to outpatient clinic with
- Exersional typical chest pain
- ECG non specific changes
- His stress ECG positive
- Echo hypokinetic apical and mid anteroseptum  
EF=

- Full anti ischaemic medication and the patient prepared for coronary angio next day

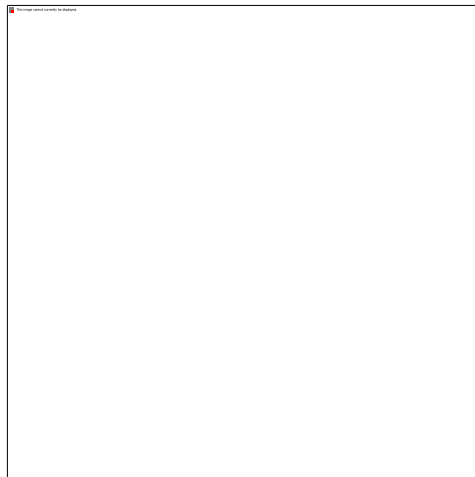
Bifurcational mid LAD long tight lesion



Long significant ramus extending from  
ostea

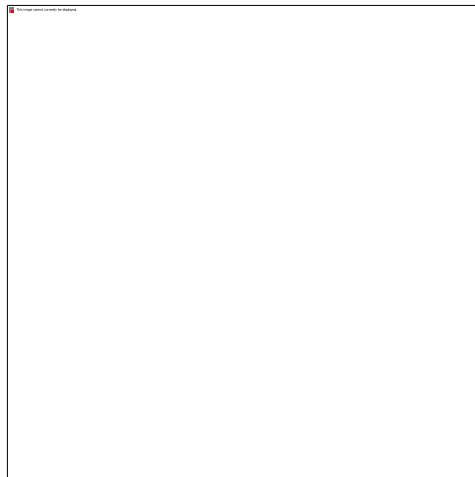


Small non dominant RCA diseased

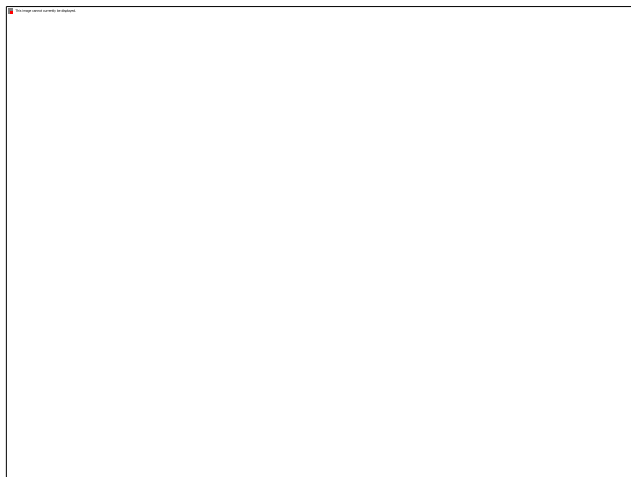


- After assesment the of diagonal branch . a little osteal affection so no indication of protection wire
- Fix LAD stent
- Ramus intermedius stent

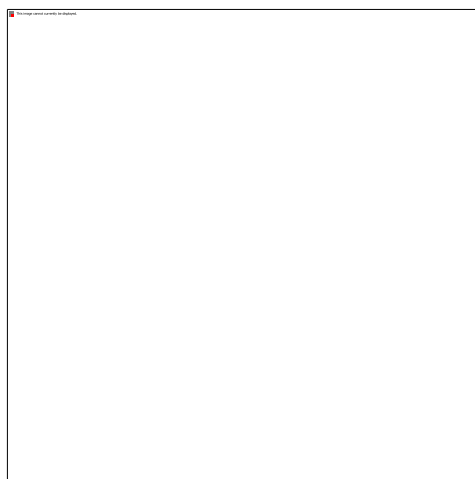
Successful pass of the wire filder XT  
with balloon dilation



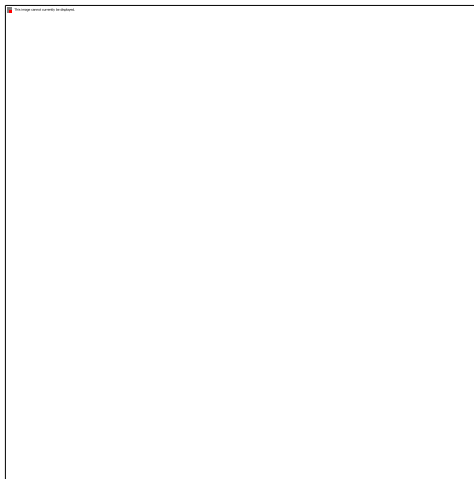
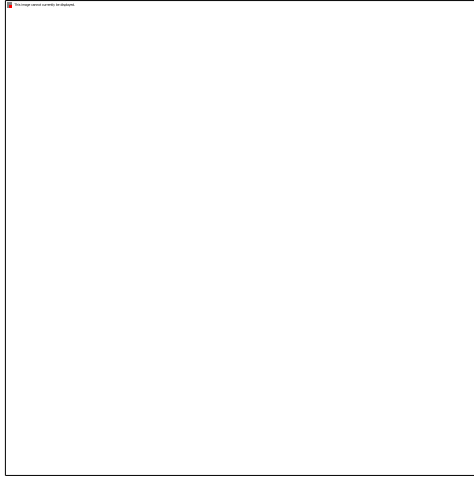
## Xience Expedition 2.5\*33



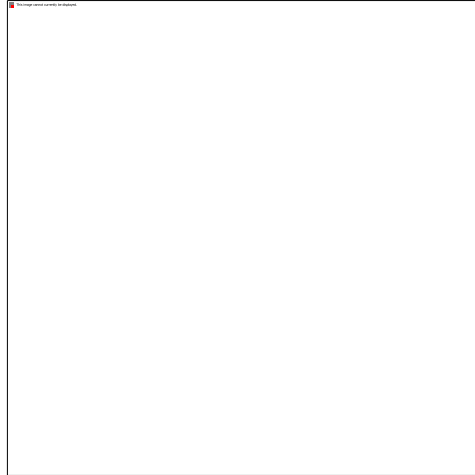
## Another proximal Stent XIENCE XPEDITION 2.75\*28



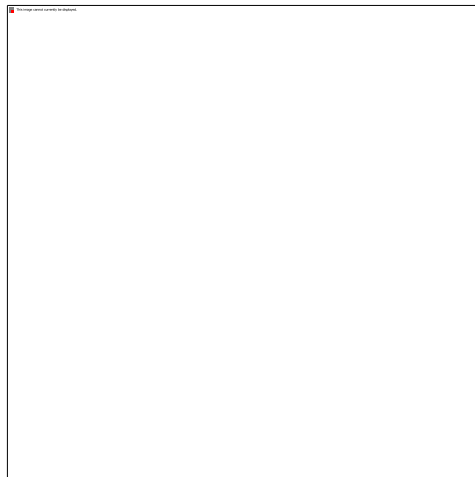
Nc post stent balloon dilation 3\*10

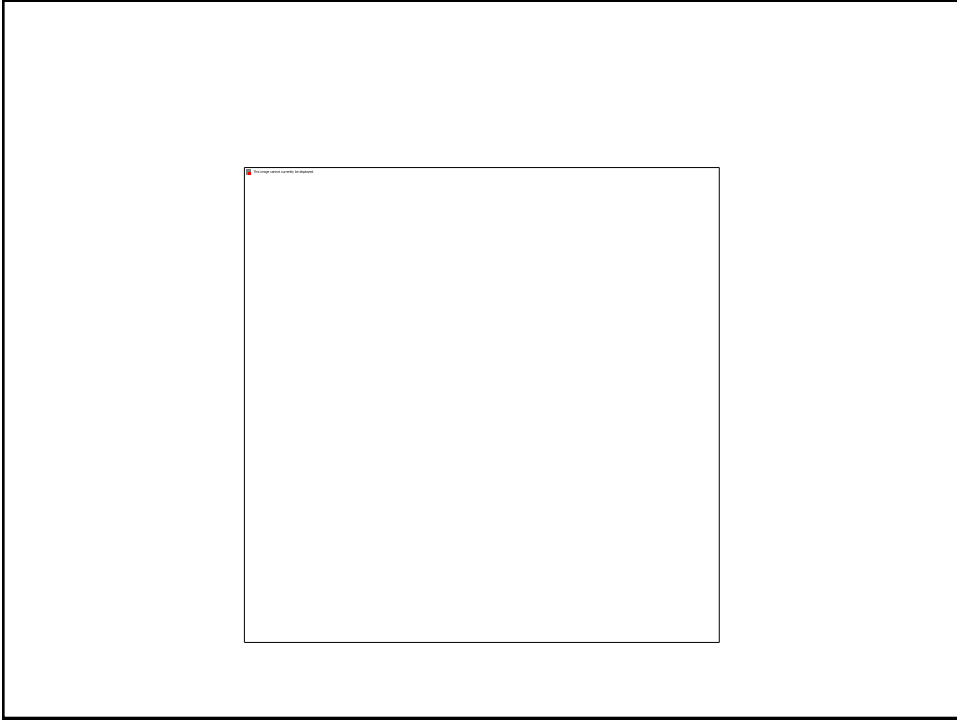


## Result post stent balloon dilation

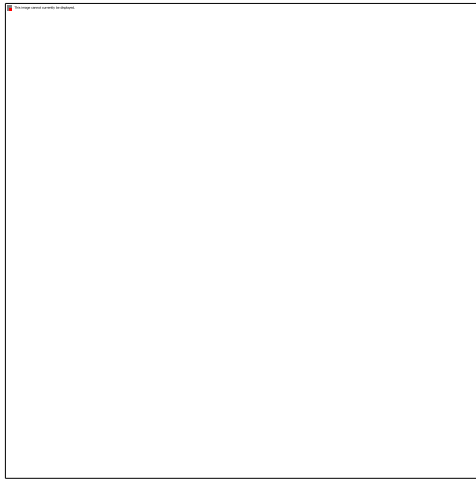


## Wiring ramus by another PT2LS wire

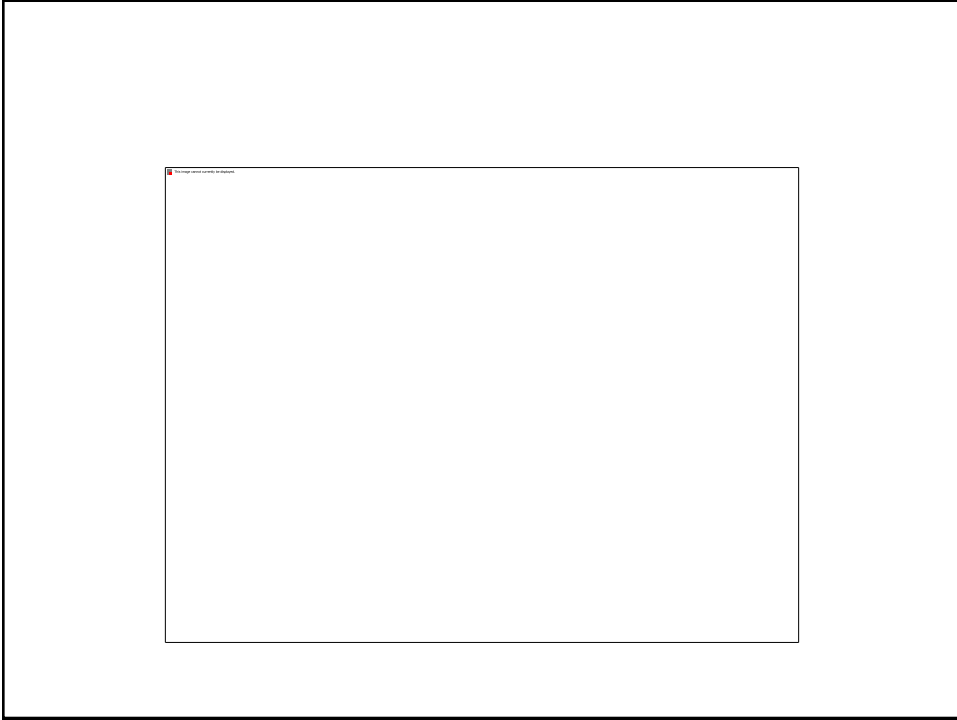




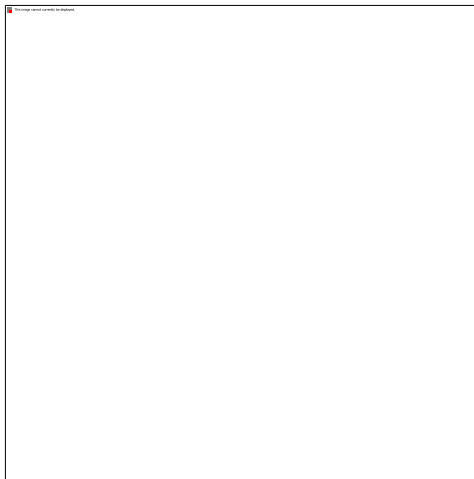
Trying to fix and adjust although  
rocking stent



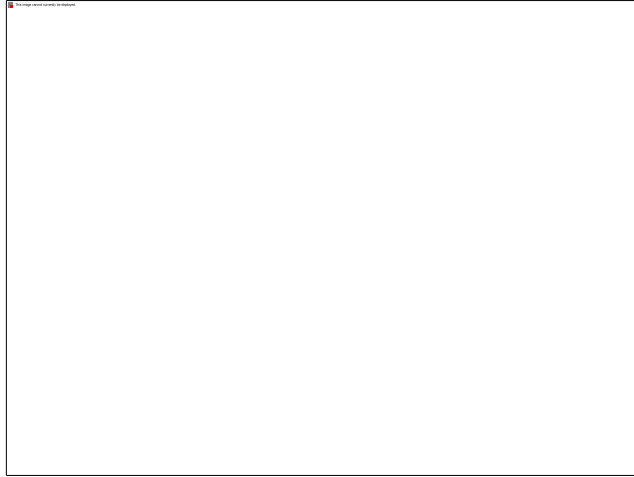




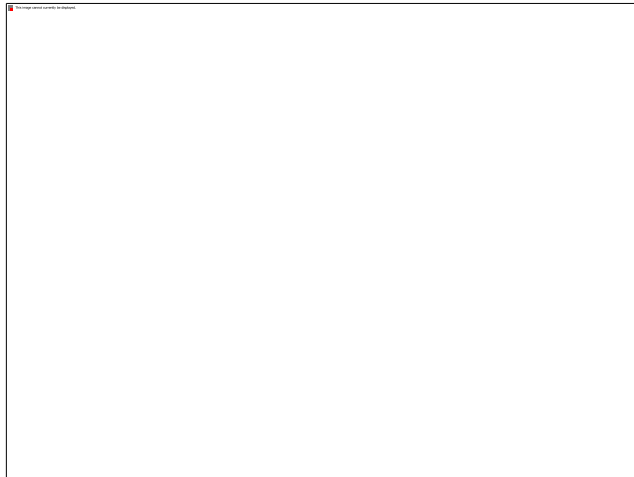
## Osteal LAD hazziness



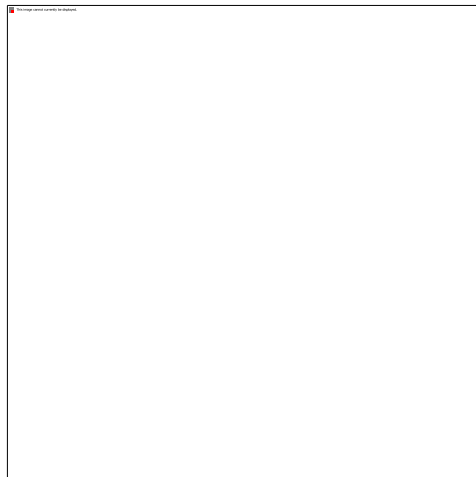
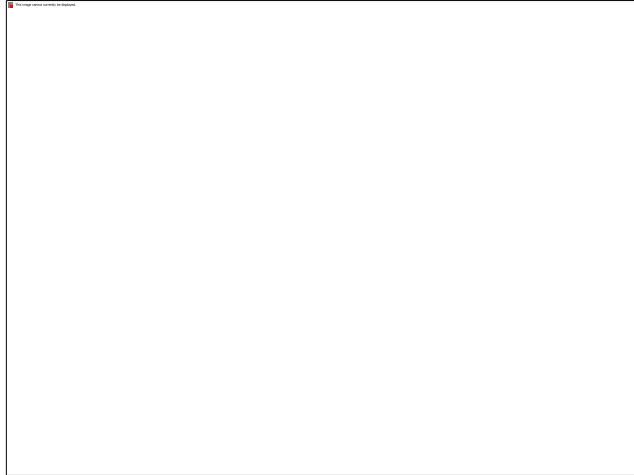
# Osteal hazziness



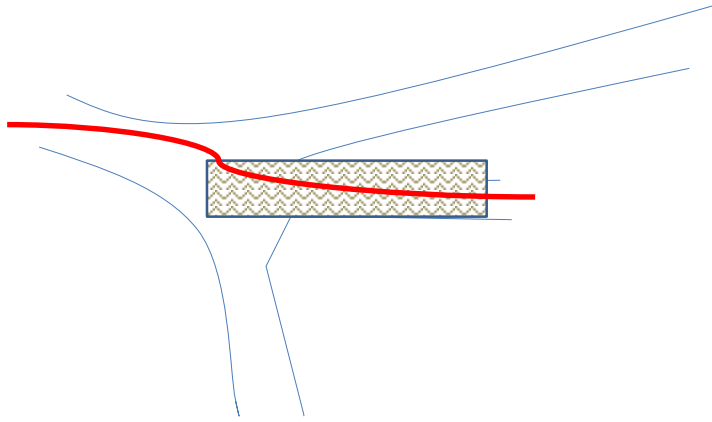
# Osteal hazziness



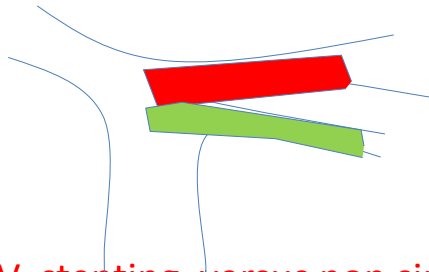
# Osteal hazziness and affection



Imagination what had been happened

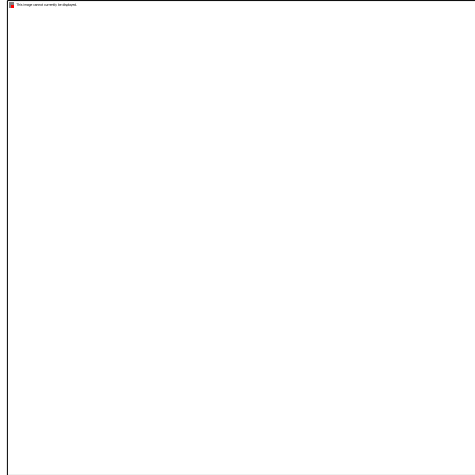


An Imagination of how to solve the problem

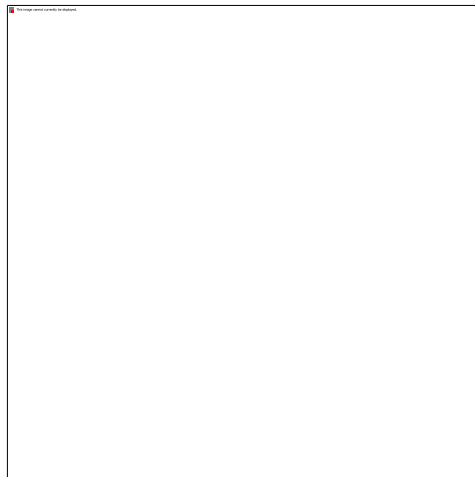


- Step V stenting versus non simultaneous kissing stent

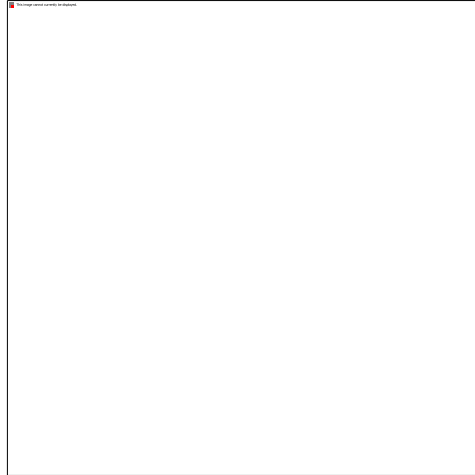
## Adjust stent in osteal LAD



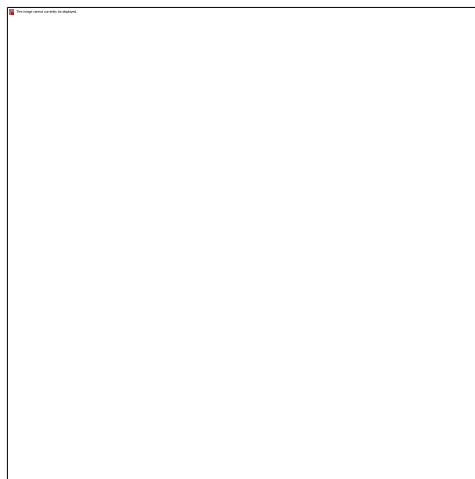
## adjust



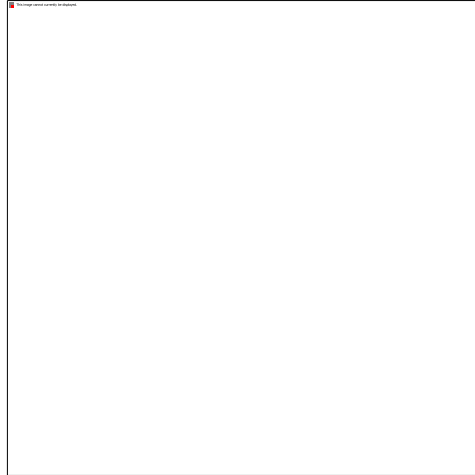
## Leaving Balloon distal in OM branch



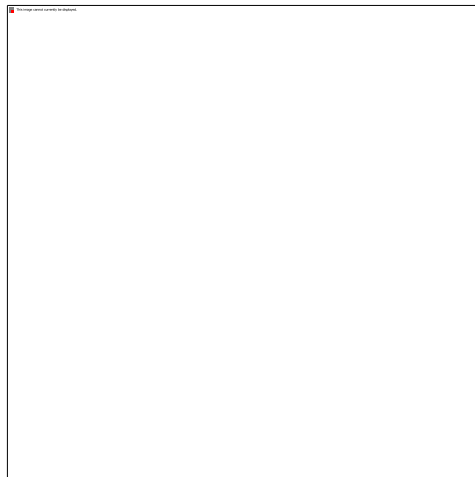
## Opening the stent



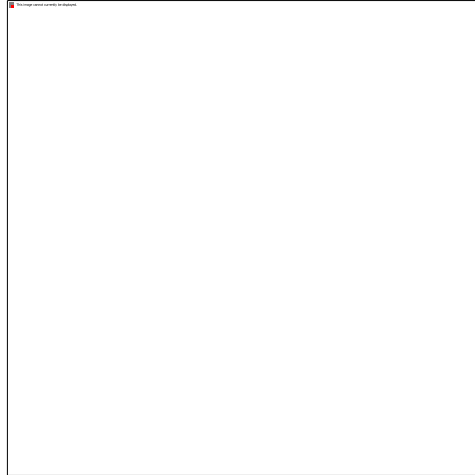
Pulling both balloon back for final kissing



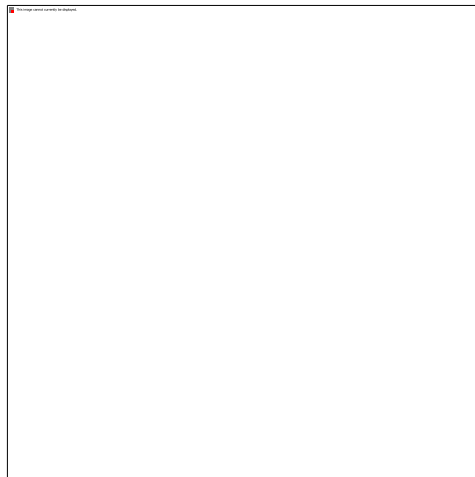
Both Kissing balloon dilation



Both kissing balloon dilation 2

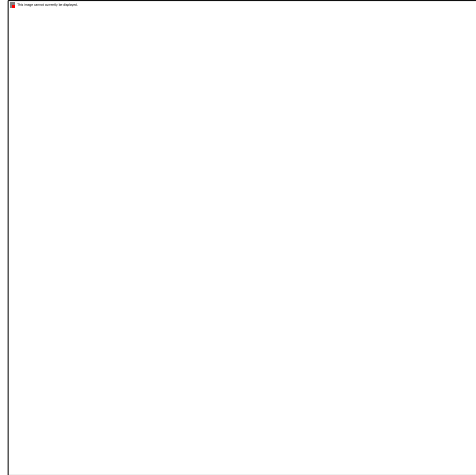


Good result after kissing

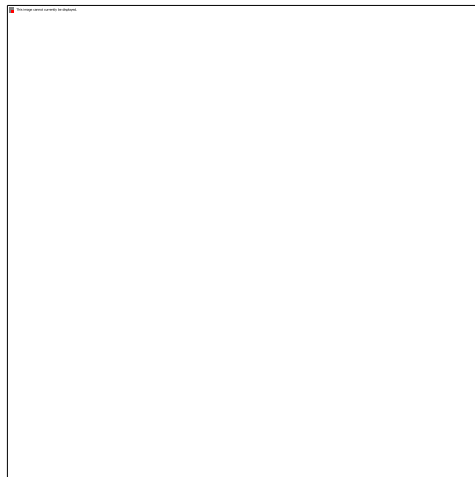




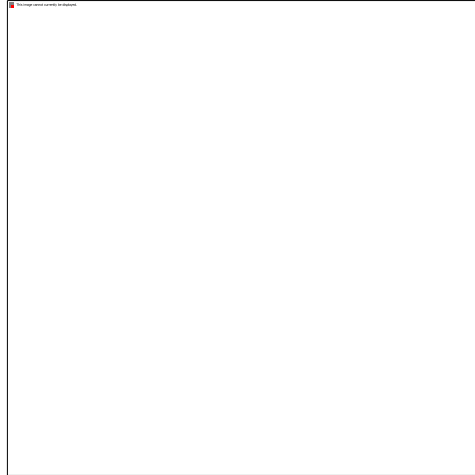
Run IVUS after nonsimultaneous kissing



Peeled Radio-opaque polymer



The wire without radio-opaque, no  
fracture, the same wire length



**Conditions with higher guidewire entrapment risk**

Use of firm tipped guidewire  
Sharp curving of guidewire tip  
Use of rotator  
Extensive maneuvers with balloon or stent catheter  
Use of stiff thrombectomy catheter  
Use of multiple guidewires  
Stenting of bifurcation lesions  
Tortuous and calcified lesion  
Chronic total occlusion  
Intervention of stent restenosis  
Coronary intervention through stent strates  
Extensive atherosclerosis of full-length  
coronary vessel  
Kinky segmented and irregular shaped  
coronary vessel  
Prolonged percutaneous coronary intervention  
session

**Management strategies of guidewire entrapment**

Conservative follow-up

Interventional techniques:

Extraction with snare catheter

Stenting over guidewire

Balloon angioplasty over guidewire

Mobilization and fixing into small side branch

Surgery:

Removal of guidewire

Accompanied endarterectomy  
and/or graft anastomosis

- Entrapment of hydrophilic coated coronary guidewire tips: Which form of management is best? Ahmet Karabulut, Enver Daglar, Mahmut Çakmak Department Of Cardiology, Istanbul Medicine Hospital, Istanbul, Turkey
- Abstract Fracture, detachment and entrapment of coronary guidewires is seen infrequently. Different treatment strategies have been performed for such cases in medical literature. Here, we present three different cases of hydrophilic coated coronary guidewire non-metallic tip entrapment. Conservative management was preferred as the main strategy, with a practical approach to fix the guidewire remnant to the coronary bed during intervention. All three patients were asymptomatic following the interventions. Besides case presentation and our treatment, we also briefly review the history and management strategies reported and discussed in the medical literature. (Cardiol J 2010; 17, 1: 104–108)

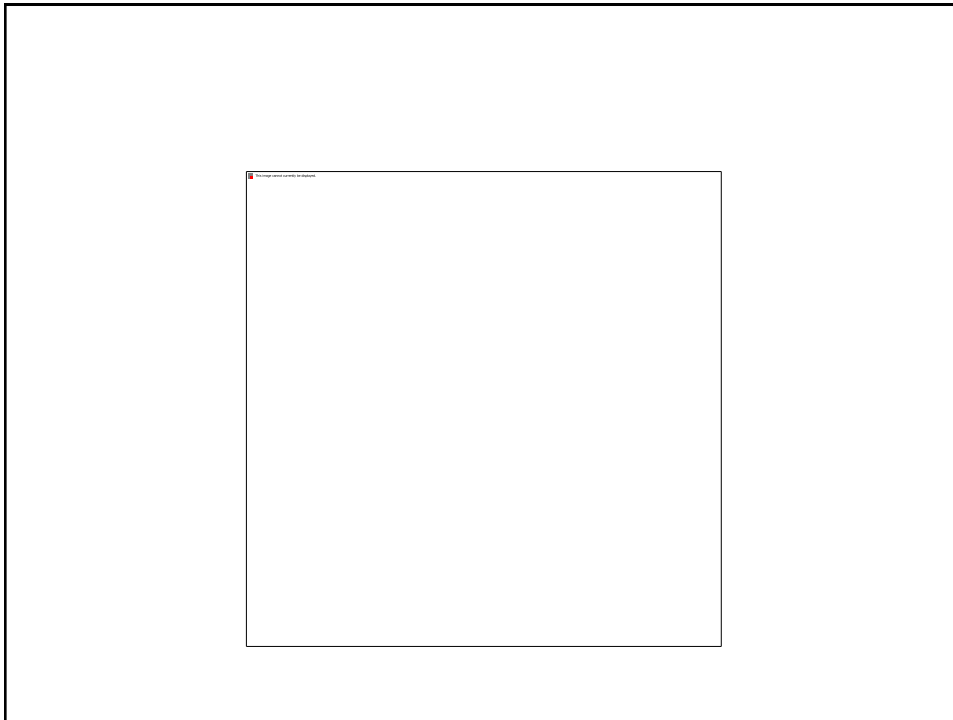
## Take Home message

- it is wisable to leave an osteal lesion in Ramus intermeduis for medical treatment.
- In case of intervention of osteal lesions it is better to load the LAD with a wire to avoid a compromised second artery.
- The benefit of the two wire is help to adjust and proceed if second artery is compromised

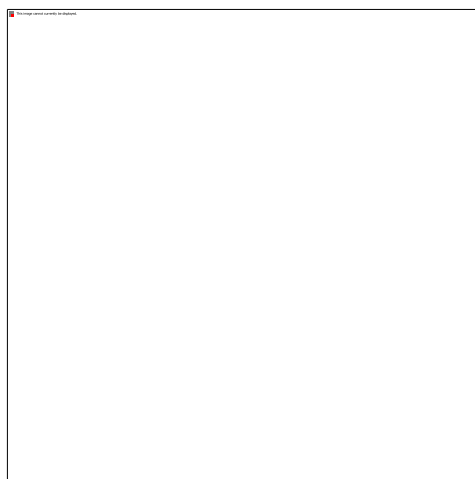
- In case of rocking movement of the stent during osteal adjustment ,Try to use short stent,adjust after 2 atm inflation, adjust during breath hold,use szabo (Tail anchor technique)
- Always try to pull the wire under screen.
- Try to leave the tip of the wire unkinked

- Your cath lab must have a snare and try to know how to use .
- Radio opaque polymer may make a thrombus , embolise ,or migrate distally or nothing
- Explain to your patient and his family what is happened regardless the culture ,or their level of anxiety but choose appropriate time

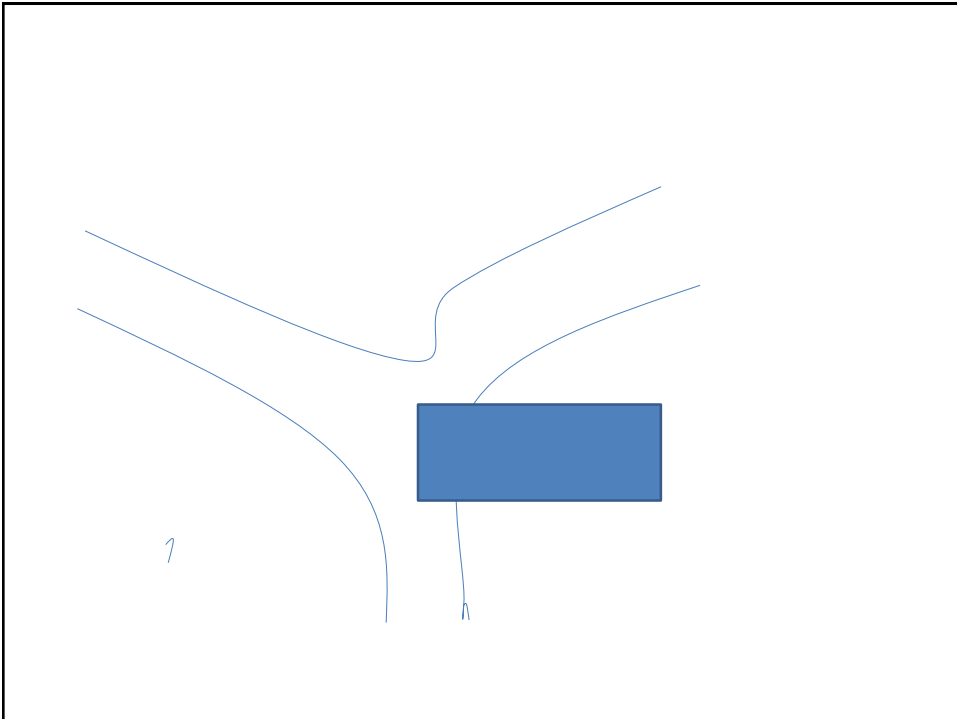
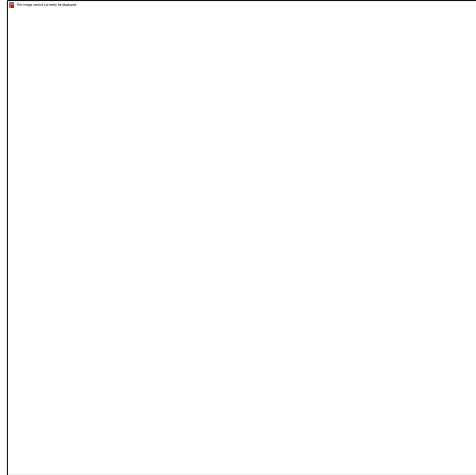
THANK YOU



2Another balloon trek 2.5#20



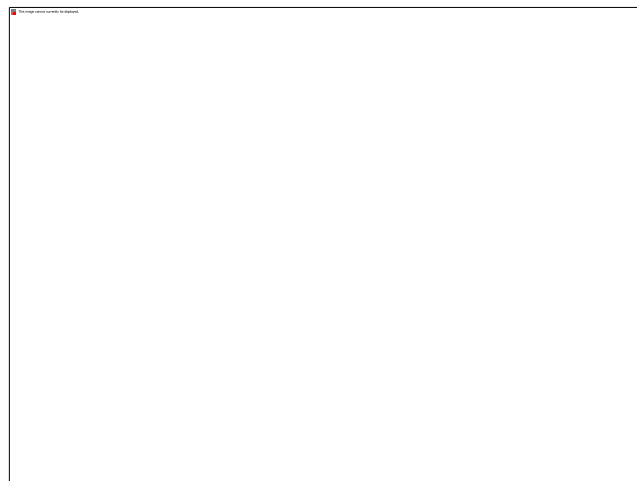
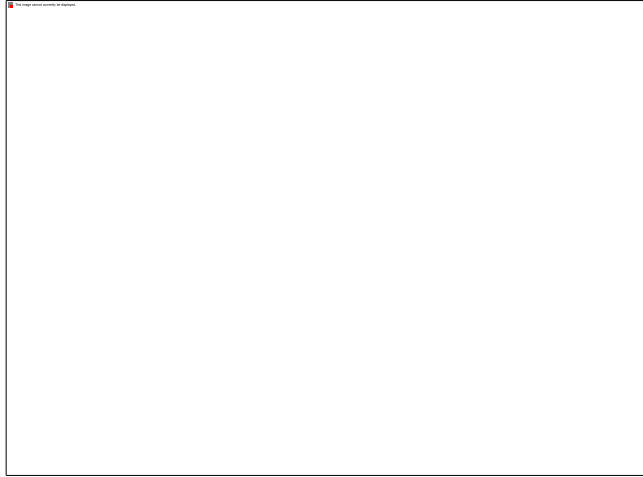
Filder XT wire to cross tight lesion  
with balloon 1.5\*15

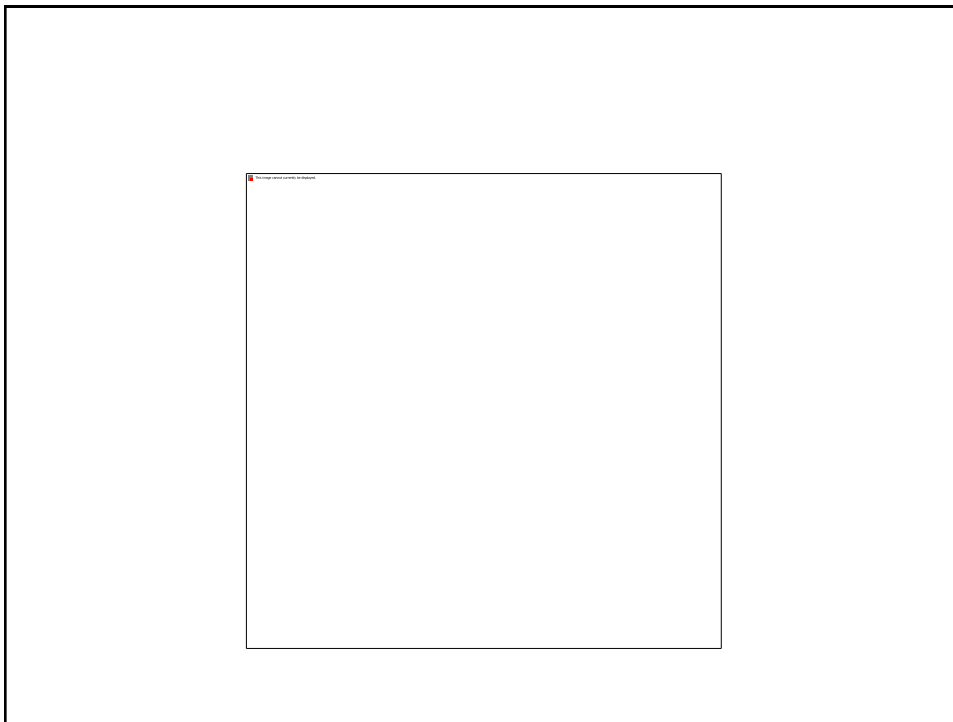




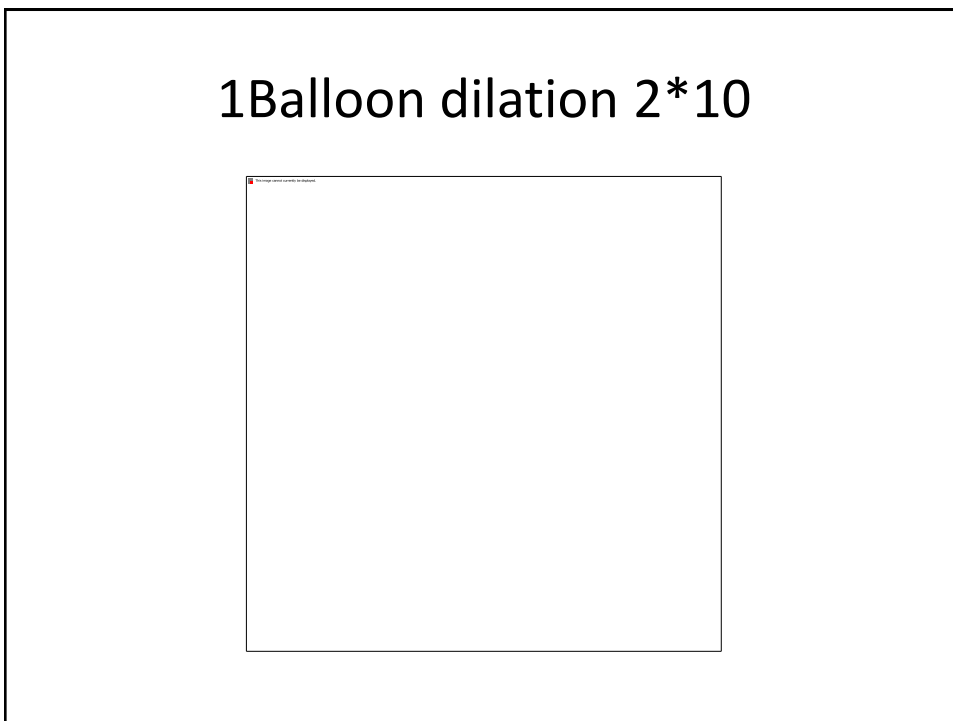


# Ramus long lesion from ostea

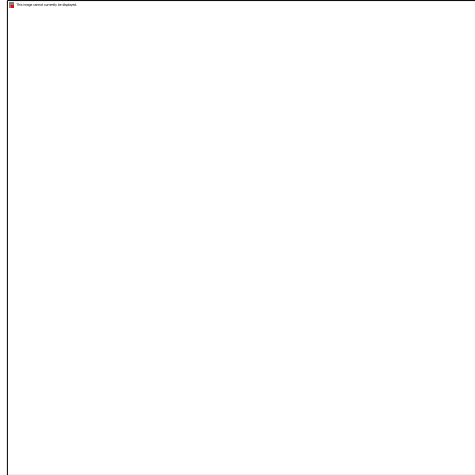




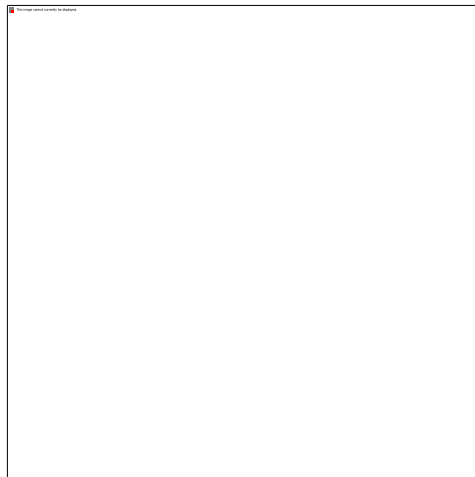
1 Balloon dilation  $2 \times 10$

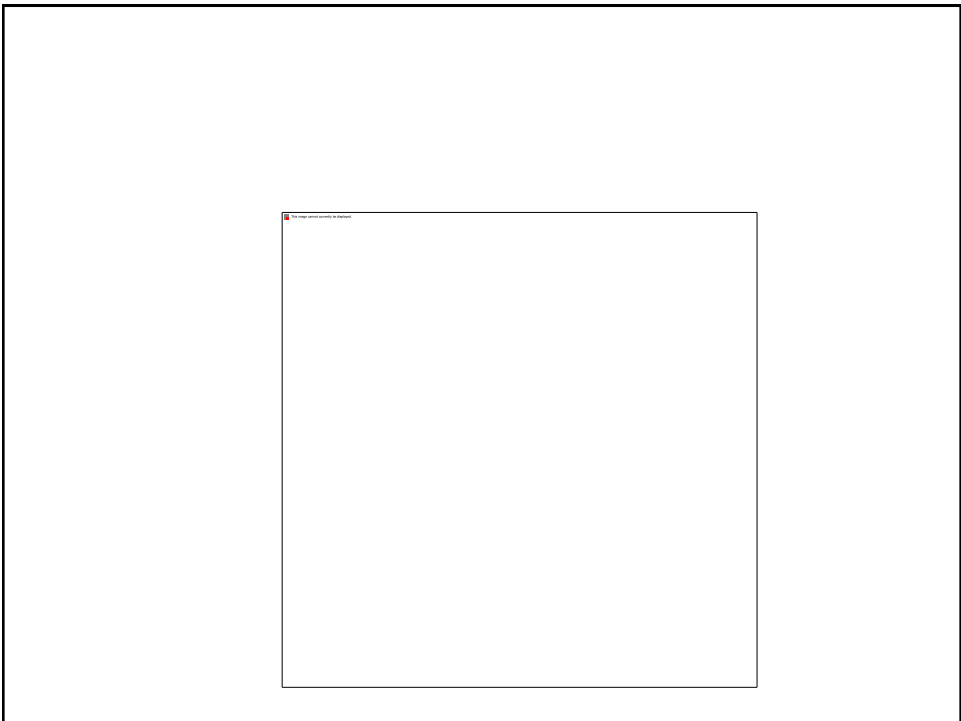
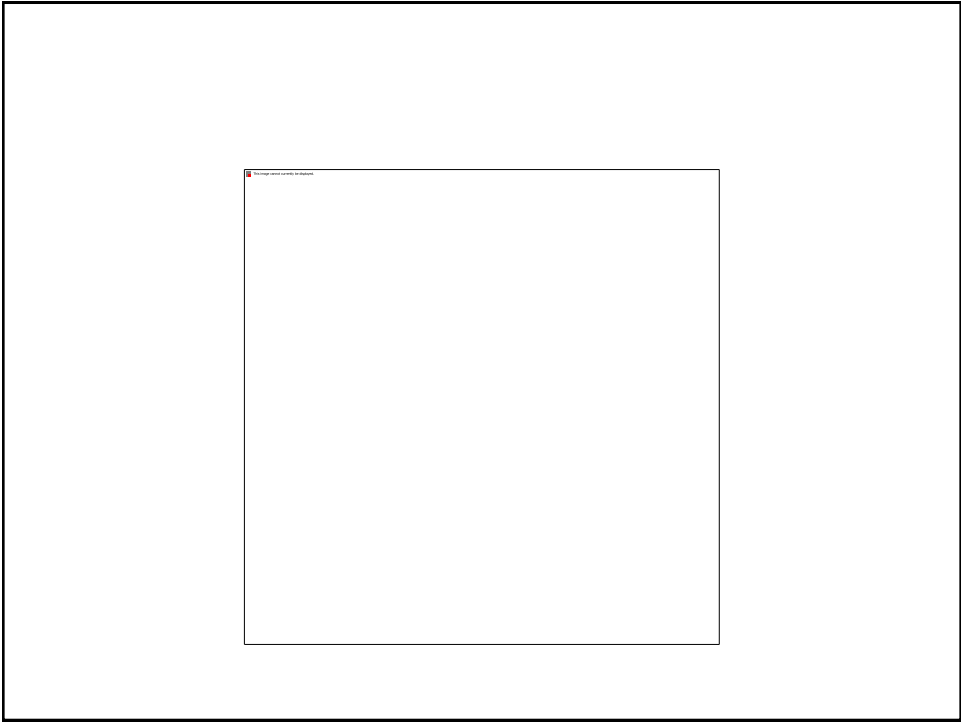


44 Result after balloon dilation 2.75\*20  
NC

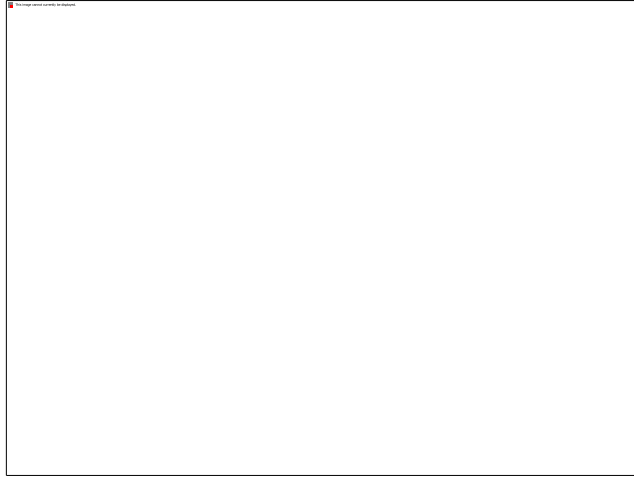


2 Another balloon 2.5\*20





3



1

