



ACC Latin America
Conference 2017



MEXICO CITY
JUNE 22 - 24, 2017

GLOBAL EXPERTS, LOCAL LEARNING



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Decision making and timing in Reperfusion for Stemi

Alexandra Arias MD



Case presentation



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- Men 55 years
- History –
 - DM2 3 years treatment with metformin 850 mg, good control
 - Hiperlypidimea without treatment 1 year
 - Smoking – 4 years – 10 cigarrets a day



Case presentation

- Presented at the ER with progressive,stabbing chest pain that began 2.5 hours prior
-



Case presentation

BP 123/75 HR 93 RR 12

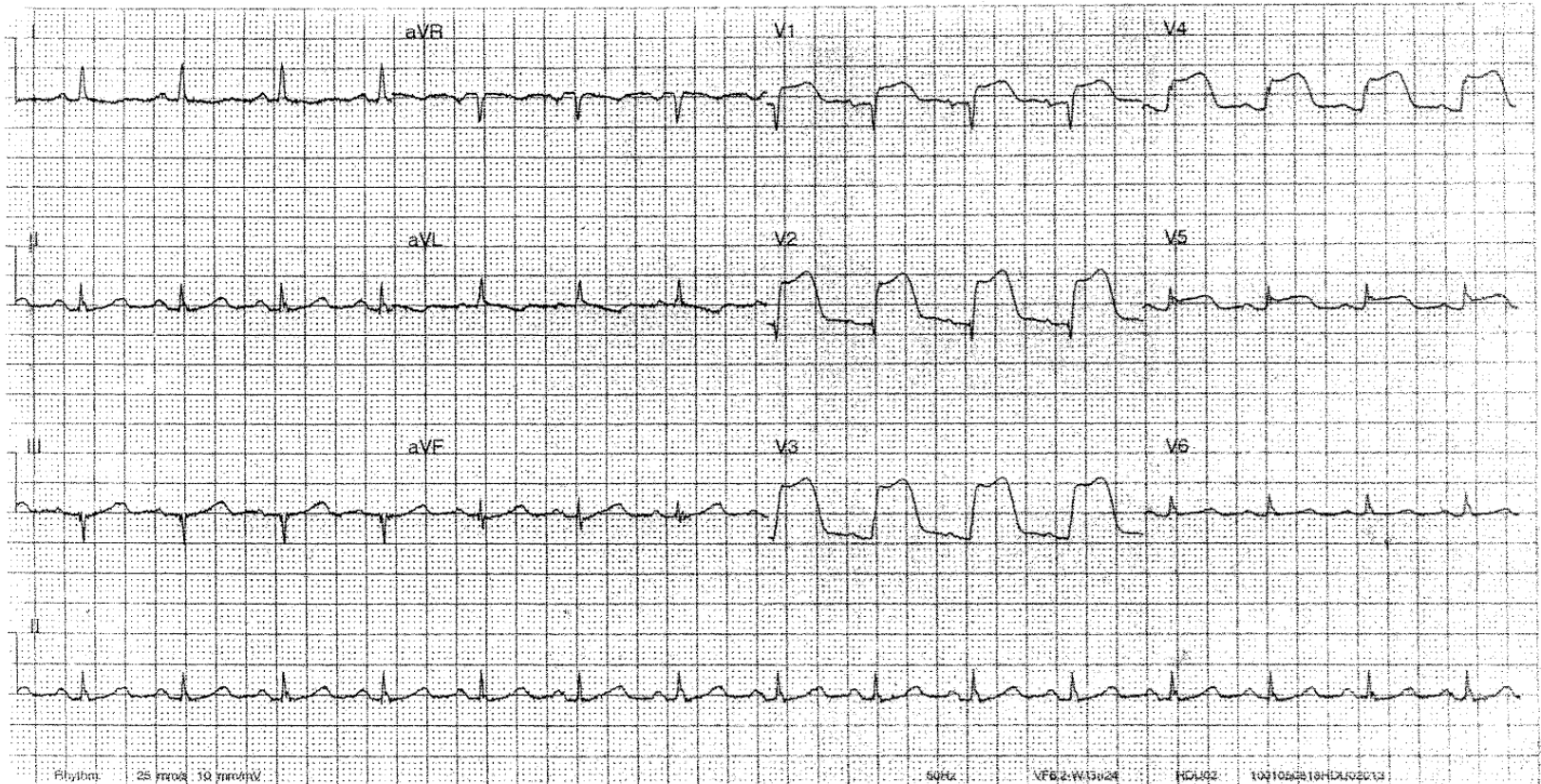
No rales, no murmurs, no extra sounds

Normal physical exam

Case presentation



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Case presentation



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Anterior STEMI – 2hs , Killip Kimball 1
The hospital is non PCI hospital
Transfer for PCI hospital > 60 min

Case presentation



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Treatment

Asprin

Clopidogrel

Reperfusion – Which is the best for this patient?





What if the hospitals do not have P-PCI
readily available ?



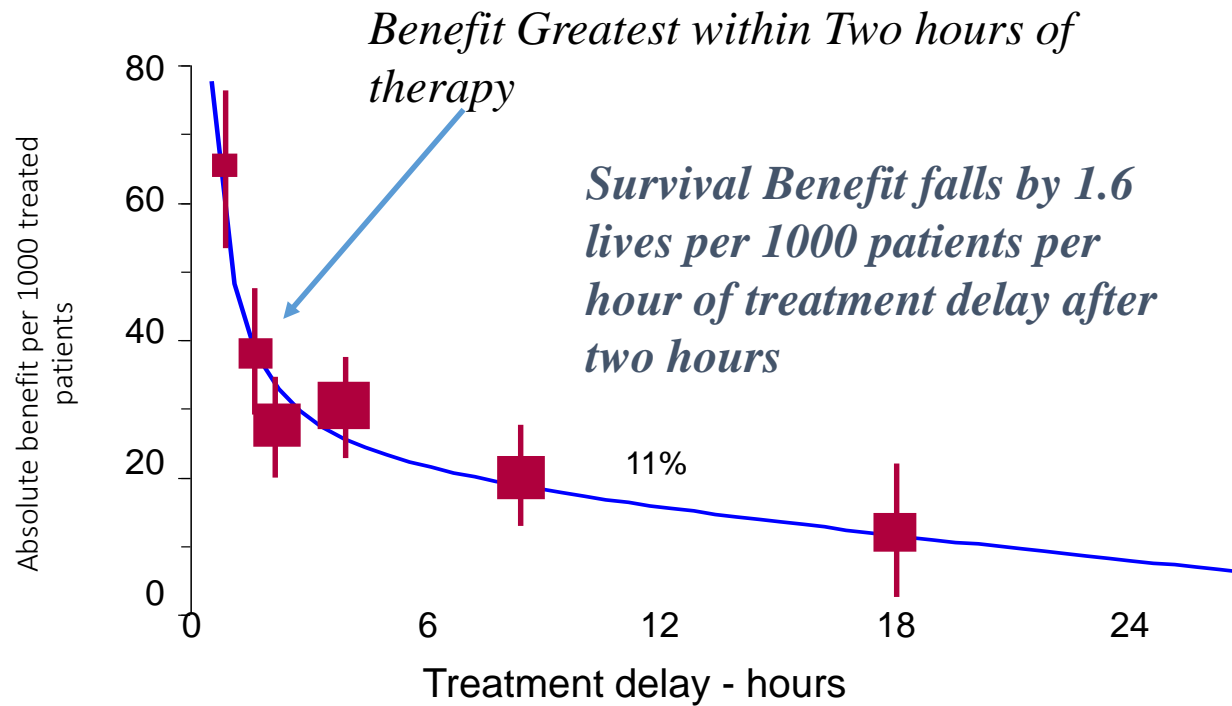


Discussion

Indications for Fibrinolytic Therapy When There Is a >120-Minute Delay From FMC to Primary PCI

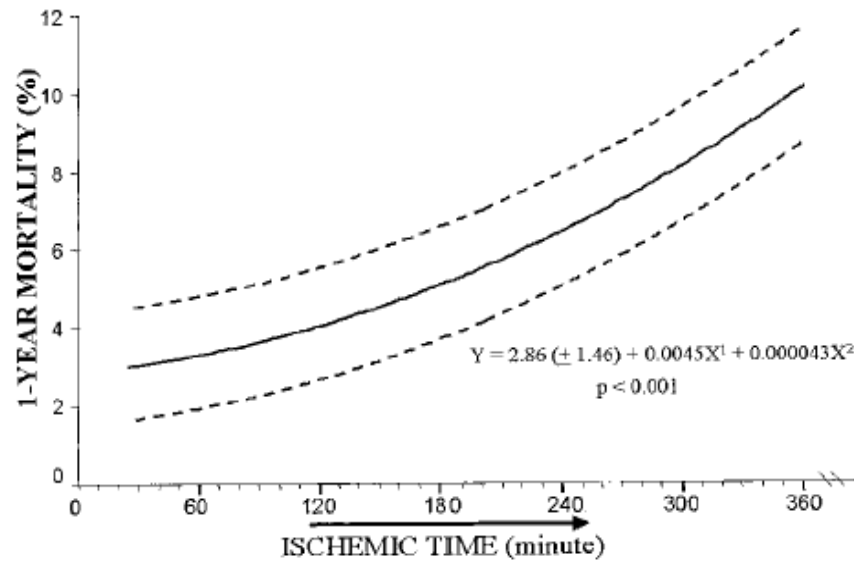
	COR	LOE
Ischemic symptoms <12 h	I	A
Evidence of ongoing ischemia 12 to 24 h after symptom onset and a large area of myocardium at risk or hemodynamic instability	IIa	C
ST depression, except if true posterior (inferobasal) MI is suspected or when associated with ST elevation in lead aVR	III: Harm	B

Thrombolytic Therapy: Importance of Early Therapy



BOERSMA, E. et al Early thrombolytic in acute myocardial treatment infarction : reappraisal of the golden hour - Lancet 1996 ; 771 - 775

Time from Symptom Onset to Treatment Predicts 1-year Mortality after Primary PCI



The relative risk of 1-year mortality increases by 7.5% for each 30-minutes delay

A delay in undergoing primary PCI reduces the benefits of the invasive approach

De Luca et al, *Circulation* 2004;109:1223-1225

Case presentation



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Treatment

Asprin

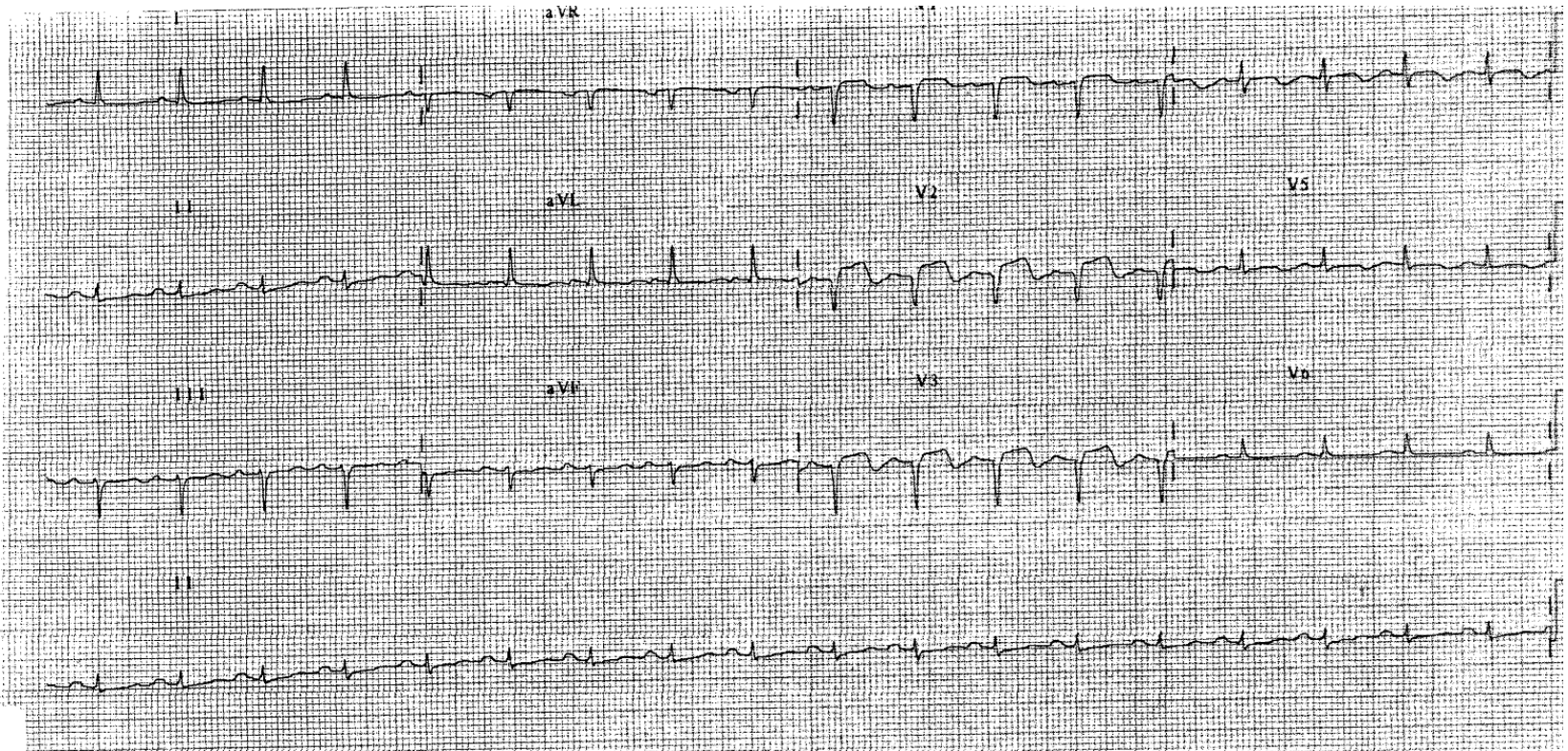
Clopidogrel

Tenecteplase

New ECG in 60 min - > 50% ST resolution

Case presentation

ECG after TNK





Case presentation

Transfer to PCI hospital 12 hours later

Angiography LAD lesion 80%

Echocardiogram EF 55% , anterior hipocinesia

Case presentation



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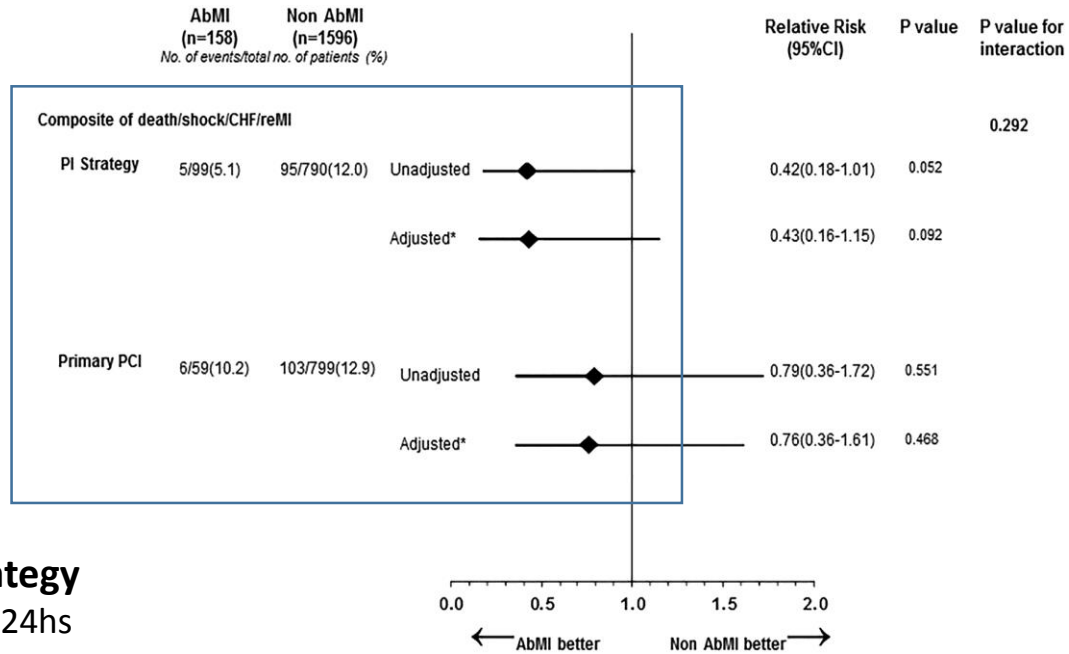
Anterior STEMI



Aborted myocardial infarction in ST-elevation myocardial infarction: insights from the STRategic Reperfusion Early After Myocardial infarction trial



Relative risk plot of the primary composite outcome and its components.



Pharmacoinvasive strategy

Fibrinolysis + early PCI 6- 24hs

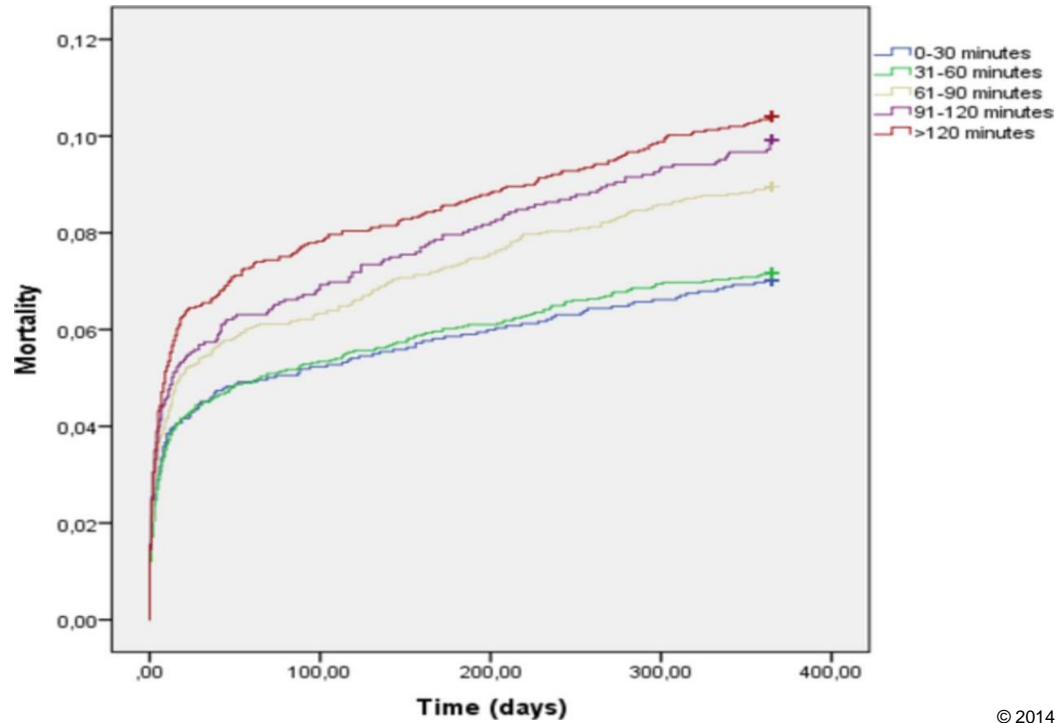
AbMI was defined as ST-elevation resolution $\geq 50\%$ (90 min

Post tenecteplase (TNK) in the PI arm or 30 min post primary PCI) with minimal biomarker rise.

Neda Dianati Maleki et al. Heart 2014;100:1543-1549

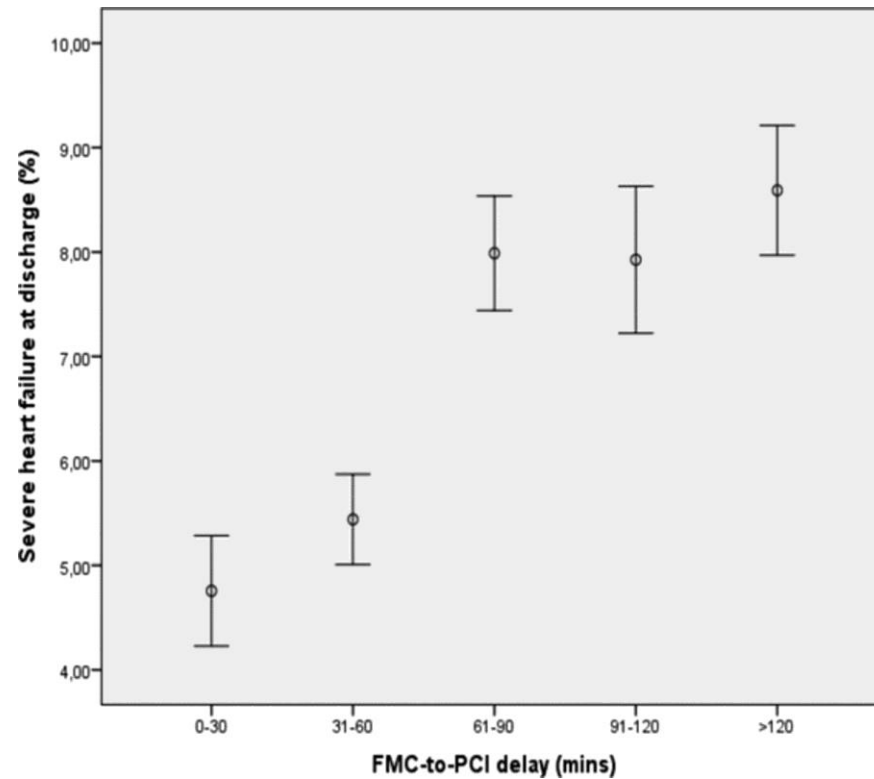


Mortality FMC-to-PCI delays in the overall patient cohort (Kaplan-Meier).



© 2014 Koul S et al.

Association between FMC-to-PCI delay and severe heart failure at discharge (error bars denote mean with standard error of the mean).





Conclusion

- Pharmaco-invasive t(hrombolysis + angioplasty) approach is a safe and effective to improve reperfusion rates and decrease mortality/morbidity for STEMI patients
- It is the best option in regions or hospital without PCI