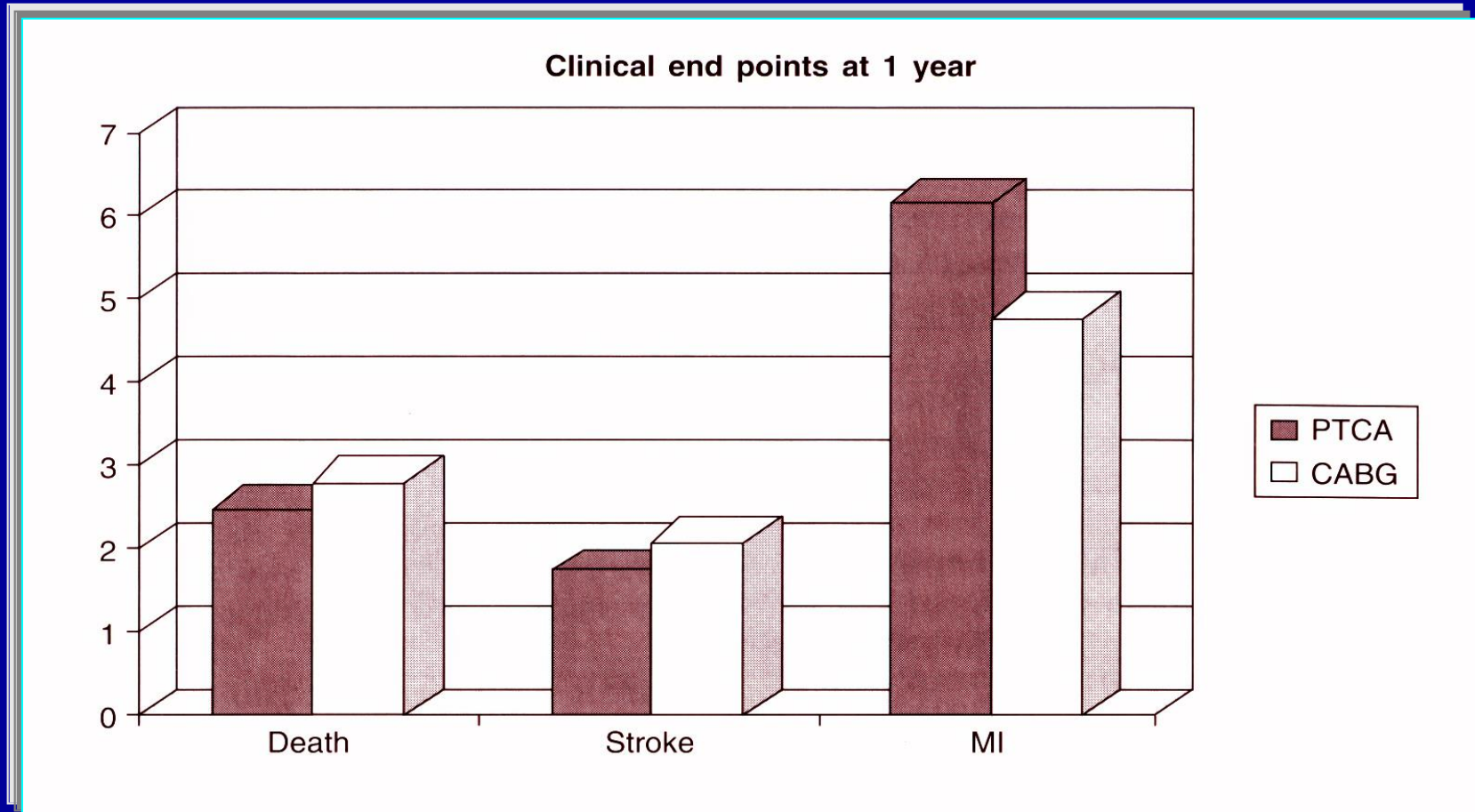


Le sindromi coronariche acute: coronarografia a tutti ?

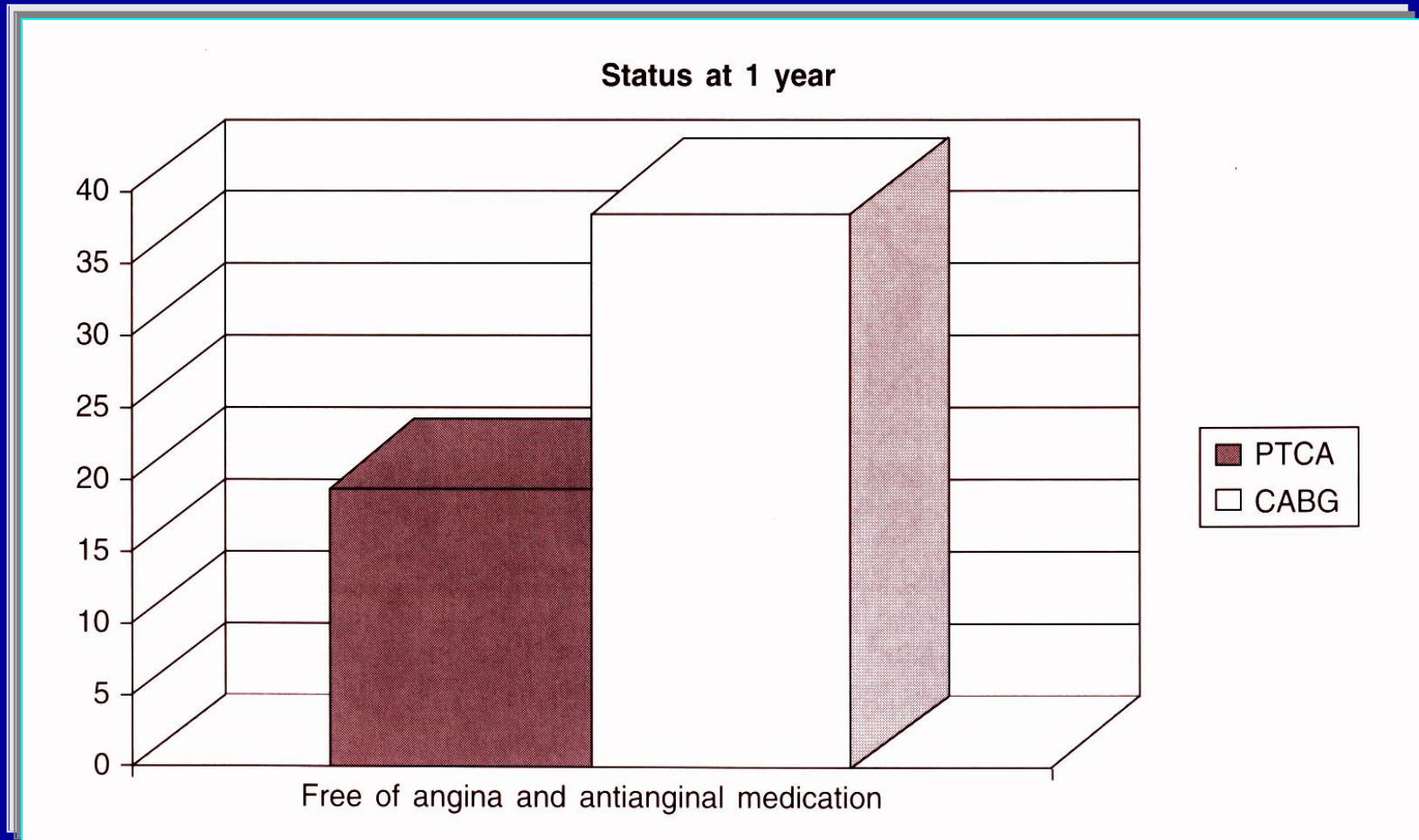
G.Morace, M.Lenuzza, L.Alcidi

“Incontri Pitagorici di Cardiologia”
Crotona 20-21 Settembre 2002

Incidenza di morte, stroke e infarto del miocardio nei pazienti sottoposti a procedure di rivascularizzazione nell'anno successivo all'intervento



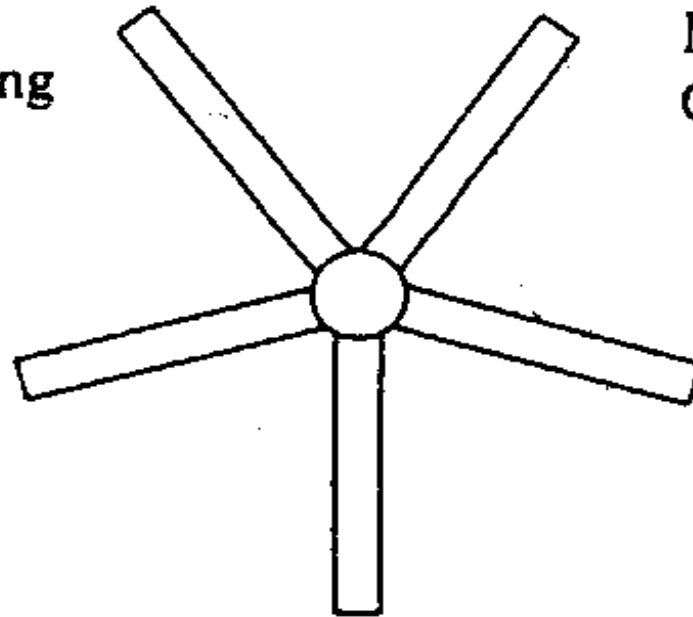
Percentuali di pazienti asintomatici anche senza terapia medica dopo una rivascolarizzazione mediante PTCA o CABG



Eziologia multifattoriale dell'angina instabile

occlusive
thrombus
on pre-existing
plaque

Progressive
Mechanical
Obstruction

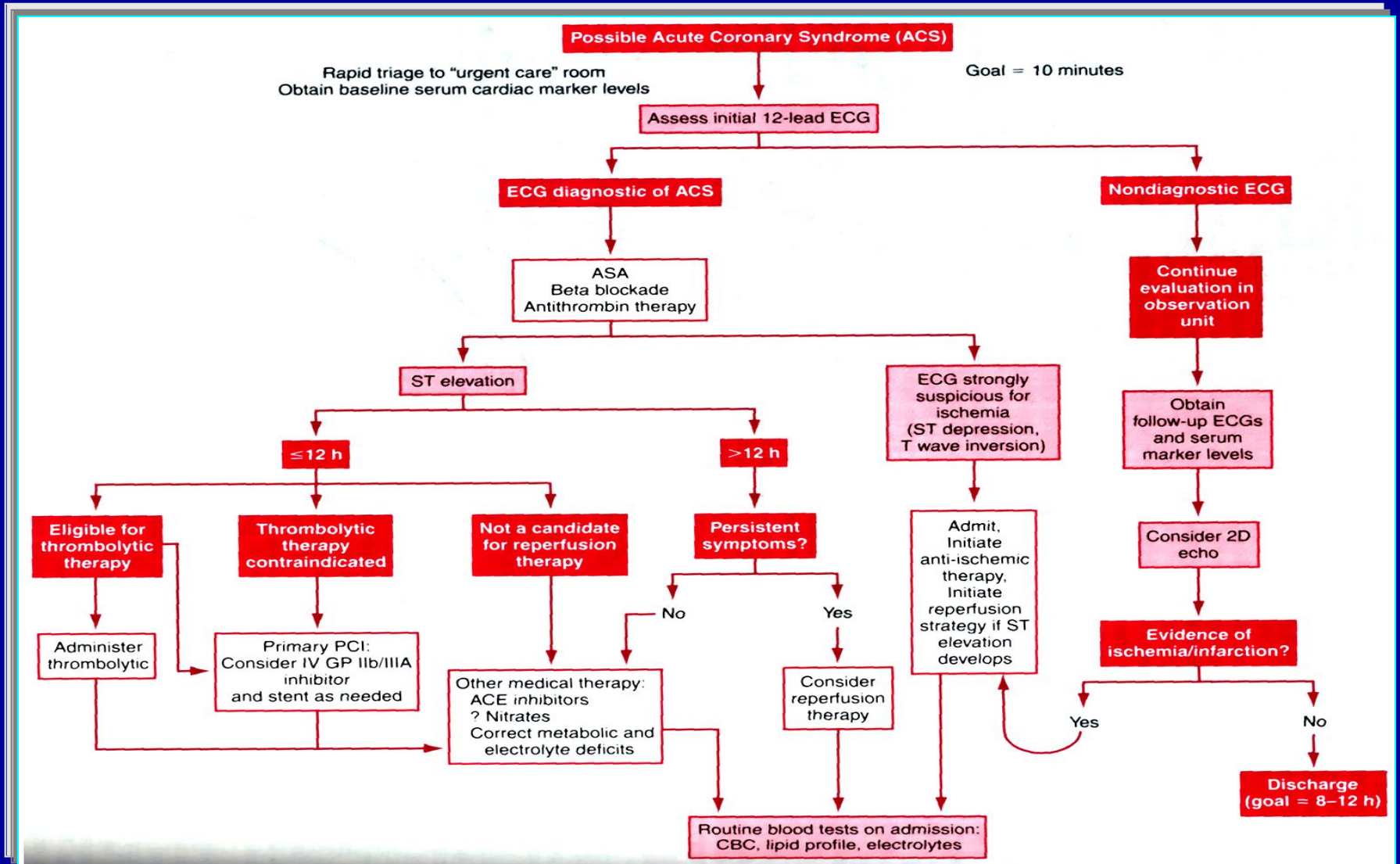


Dynamic
Obstruction

Secondary UA
(\uparrow MVO_2)

Inflammation
Infection

Algorithm for management of patients with suspected acute coronary syndrome in emergency department



Acute ischemia pathway

Recurrent ischemia and/or
ST segment shift, or
Deep T-wave inversion, or
Positive cardiac markers

Aspirin
Beta blockers
Nitrates
Antithrombin regimen
GP IIb/IIIa inhibitor
Monitoring (rhythm and ischemia)

Early *invasive* strategy

Early *conservative* strategy

Angiography

12–24 hour angiography

Recurrent symptoms/ischemia
Heart failure
Serious arrhythmia

Patient stabilizes

Evaluate LV function

Stress test

EF \leq .40

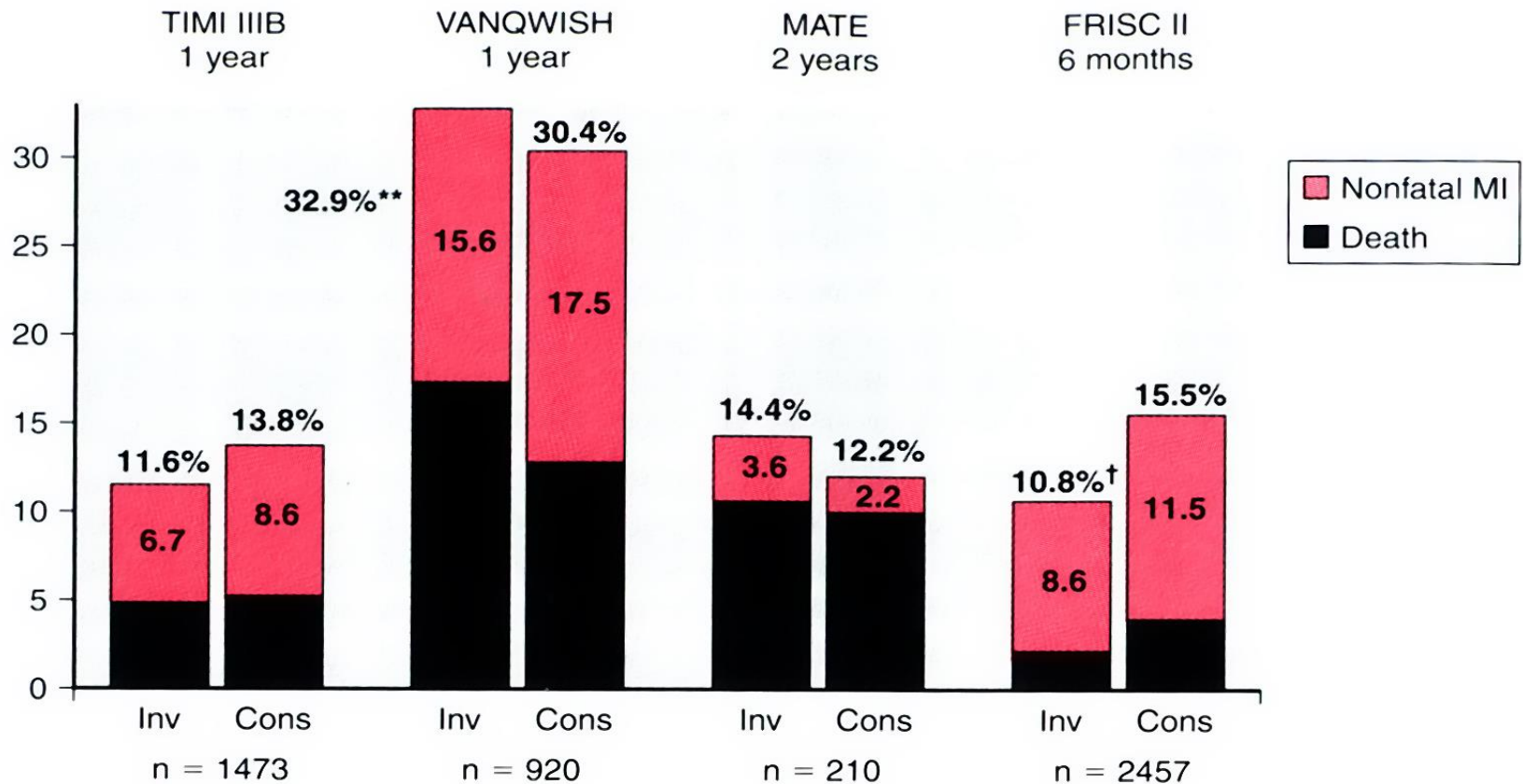
EF \geq .40

Not low risk

Low risk

Follow on
medical Rx

Result from the randomized trials of invasive (Inv) vs. conservative (Cons) strategies in UA/NSTEMI



In-hospital procedures

Procedure	Inv (%)	Cons (%)
Cath	98%	57%
Revasc	60%	40%

Short-Term Risk of Death or Nonfatal MI in Patients With UA *

High Risk

Feature

(At least 1 of the following features must be present)

History

- Accelerating tempo of ischemic symptoms in preceding 48 hrs

Character of pain

- Prolonged ongoing (>20 min) rest pain

Clinical findings

- Pulmonary edema, most likely related to ischemia
- New or worsening MR murmur
- S3 or new/worsening rales
- Hypotension, bradycardia, tachycardia
- Age > 75 y

ECG findings

- Angina at rest with transient ST-segment changes > 0.05 mV
- Bundle-branch block, new or presumed new
- Sustained ventricular tachycardia

Cardiac markers

- Markely elevated (eg, TnT or TnI > 0.1 ng/mL)

Short-Term Risk of Death or Nonfatal MI in Patients With UA **

Intermediate Risk

(No high-risk feature but must have 1 of
the following feature)

Feature

History

- Prior MI, peripheral or cerebrovascular disease, or CABG, prior aspirin use

Character of pain

- Prolonged (>20 min) rest angina, now resolved, with moderate or high likelihood of CAD
- Rest angina (<20 min or relieved with rest or sublingual NTG)

Clinical findings

- Age > 70 y

ECG findings

- T-wave inversions > 0.2 mV
- Pathological Q waves

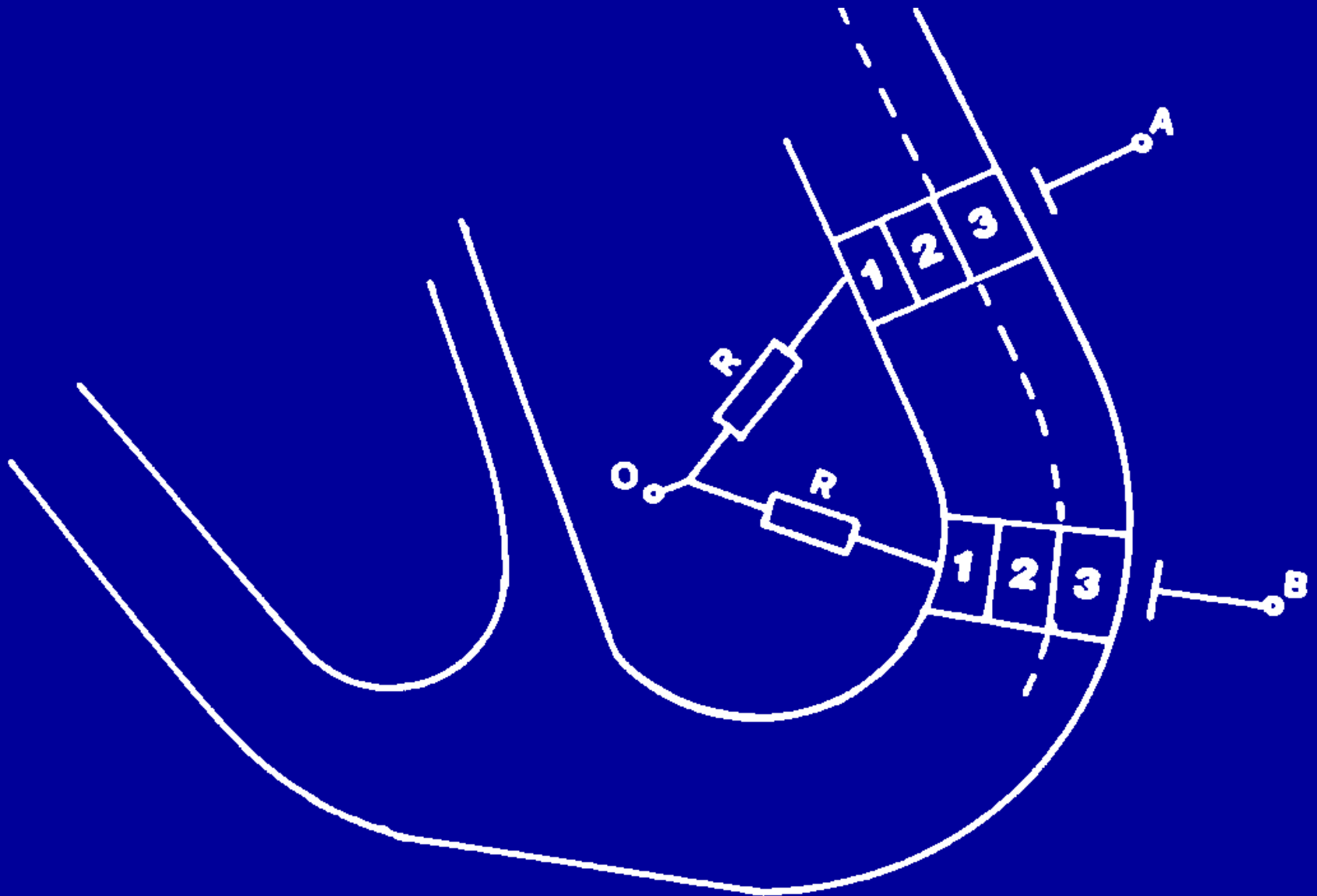
Cardiac markers

- Slightly elevated (eg, TnT > 0.01 but < 0.1 ng/mL)

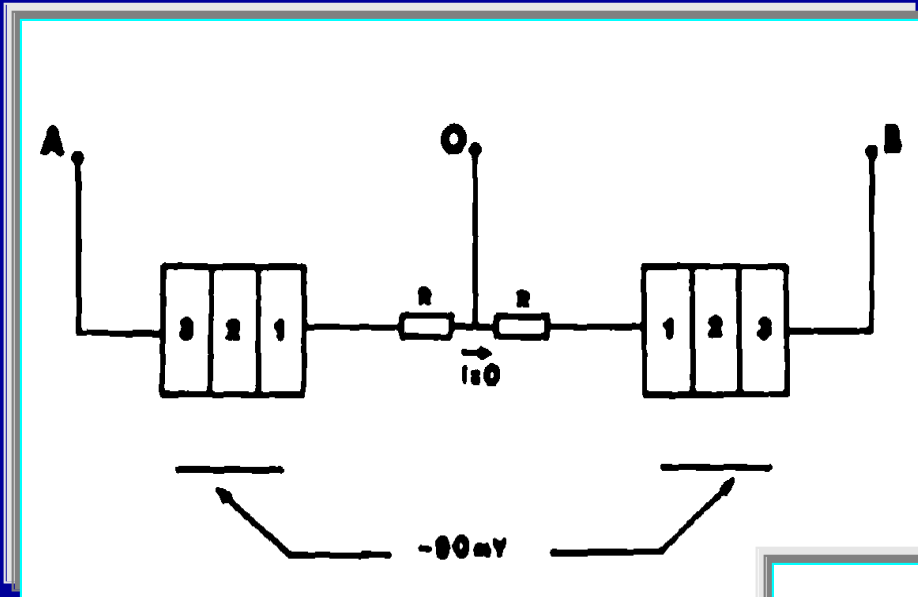
Short-Term Risk of Death or Nonfatal MI in Patients With UA ***

Feature	Low Risk (No high- or intermediate-risk feature but may have any of following features)
History	
Character of pain	- New-onset CCS Class III or IV angina in the past 2 wk with moderate or high likelihood of CAD
Clinical findings	
ECG findings	- Normal or unchanged ECG during an episode of chest discomfort
Cardiac markers	- Normal

Simulatore elettronico



Simulatore elettronico

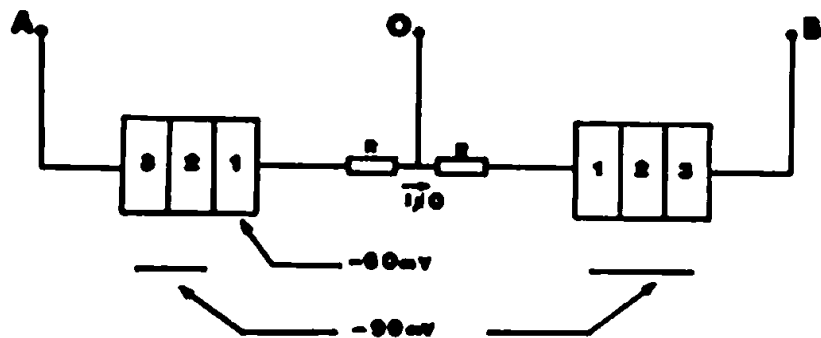


Configurazione circuitale di base. Corrente nel punto 0 (central terminal)=0

Segnali misurati nelle derivazioni O-A, O-B e relativi potenziali d'azione nelle 3 sezioni

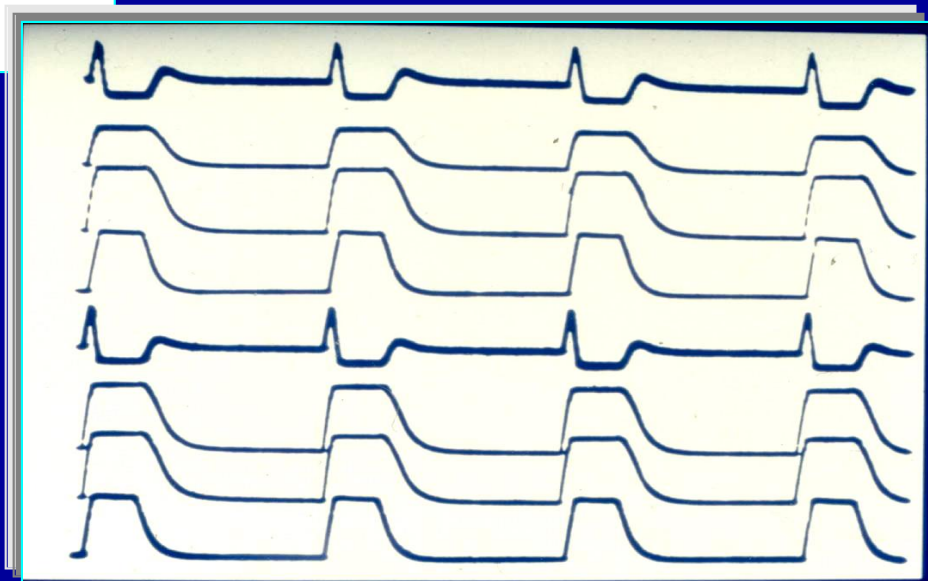


Simulazione di ischemia subendocardica

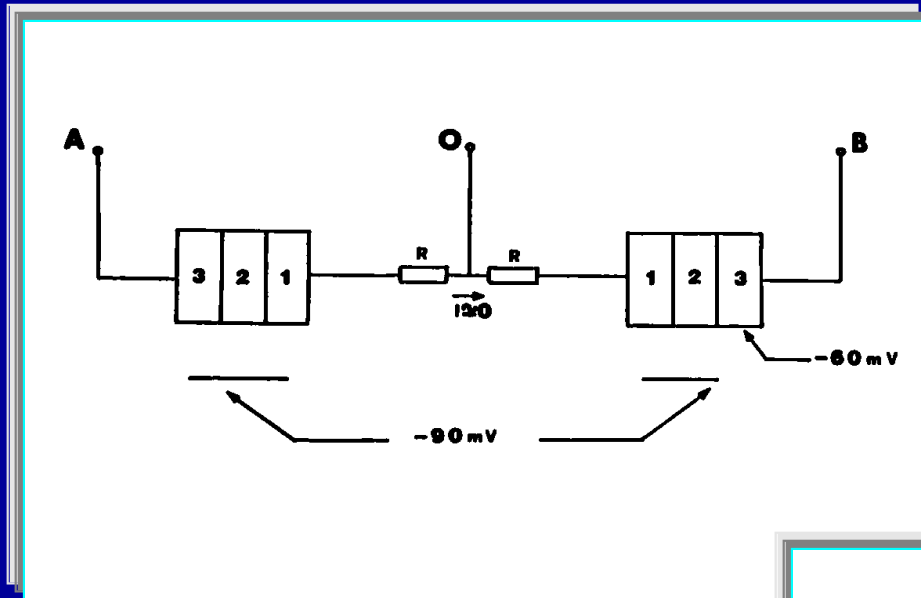


Diminuzione del potenziale
del generatore 1A

Sottoslivellamento del
tratto ST in entrambe
le derivazioni A e B

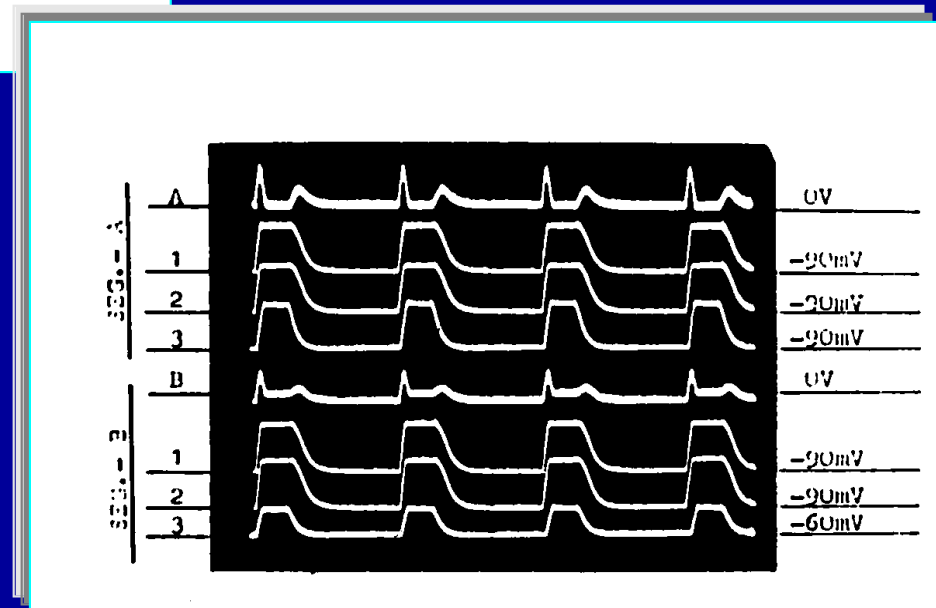


Simulazione di ischemia subepicardica

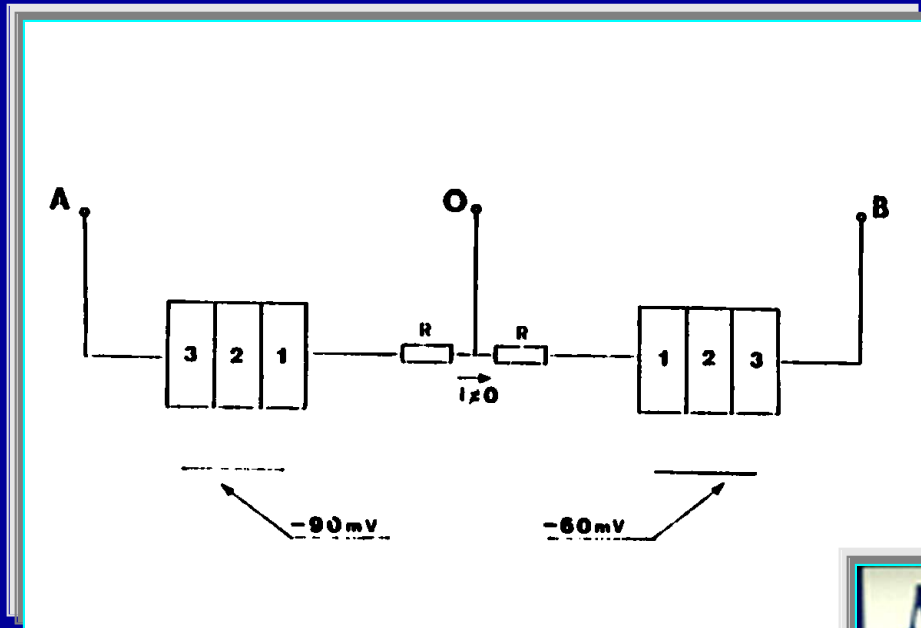


Diminuzione del potenziale del generatore 3B

Sopraslivellamento del tratto ST nella derivazione B

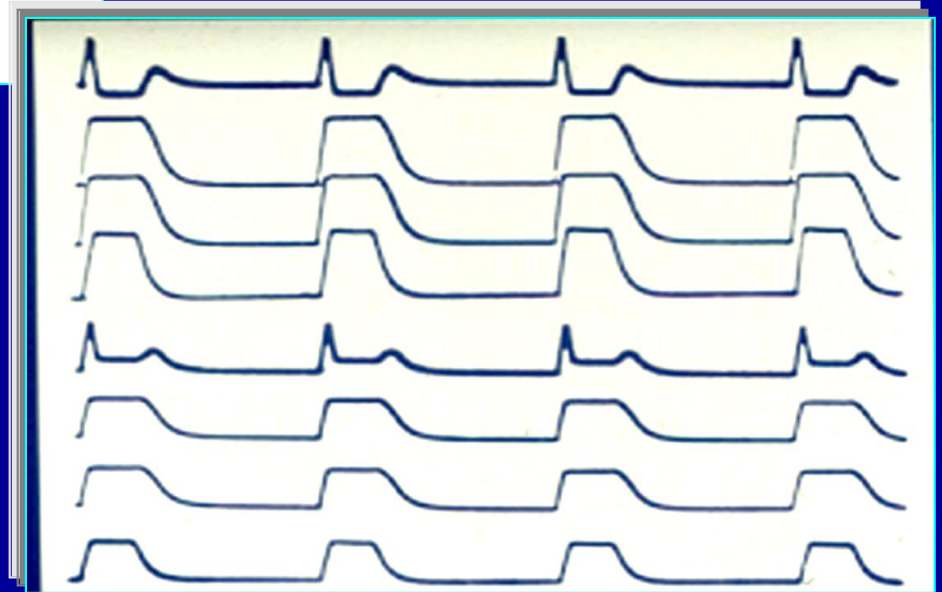


Simulazione di ischemia transmurale



Diminuzione del potenziale
dei tre generatori B

Tratto ST sottoslivellato
in A e sopraslivellato in B



"Nulla conosciamo secondo verità;
perché la verità è nel profondo"

Democrito 68B-117