Anatomathological clínical round - 2010

Cardiology Residency at Hospital Cosme Argerich

ANATOMOPATHOLOGICAL CLINICAL ROUND

Cosme Argerich Hospital

Cardiology Division

- Clinical round: G.M.J. Date of admittance: 25/3/07
- Gender: Female Date of death: 25/3/07
- Age: 74 years old

- **Reason to be admitted:** Referred from the Rivadavia Hospital (City of Buenos Aires) for rescue angioplasty.
- **Current disease:** 74-year-old patient who started on March 24th at 20 hrs with prolonged precordial pain in rest, and irradiation to the left arm. The next day she calls the Emergency Service at 8 hrs and is evaluated at her home, where the symptoms are interpreted as hypoglycemia. Since the symptoms persisted, she went at 13 hrs to the Rivadavia Hospital. In admittance an extensive anterior subepicardial injury is verified plus complete right bundle branch block (CRBBB) and left anterior hemiblock (LAHB). She received thrombolytic treatment with streptokinase, one hour later displaying clinical syndrome of negative reperfusion. For this reason, it is decided to refer her to this center for rescue angioplasty (PTCA).

Onset of pain	24/3/07	20 Hrs.
Goes to Rivadavia Hospital	25/3/07	13 Hrs.
Door-to-needle time		3 Hrs. 30 min.
Admittance Argerich Htal.	25/3/07	18 Hrs. 30 min.
Door-to-balloon time	Rivadavia – Argerich	6 Hrs. 5 min.
Time window		23 Hrs. 5 min.

- **Coronary risk factors**
- Diabetes Mellitus type II. (5-year evolution, requiring insulin).
- Post menopausal.
- Smoker.

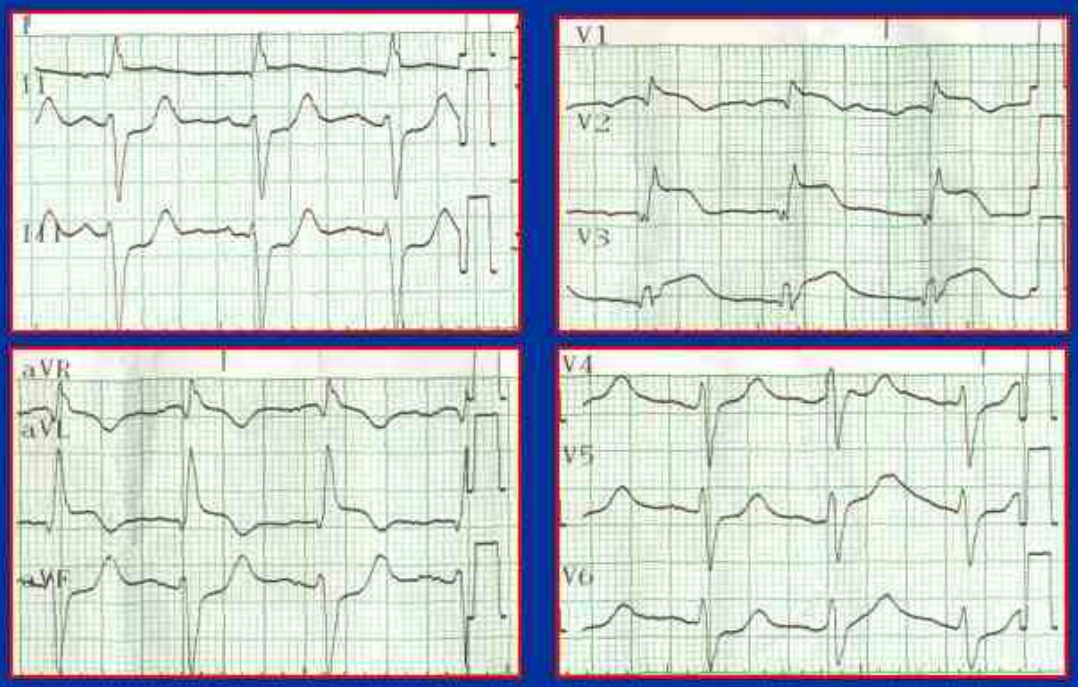
Physical examination

BP: 120/70 mmHg **HR:** 95 bpm **RF:** 22 cpm **T°:** 36,5 °C

- **CV:** Good peripheral perfusion. Jugular ingurgitation 1/3. No hepatojugular reflux. S1 and S2 in 4 foci. No murmurs.
- **Respiratory:** Regular ventilation mechanics, crepitations up to bilateral middle fields.
- **Abdomen:** Soft, non-tender, painless, no palpable visceromegaly, bowel sounds present.
- **CNS:** Lucid, no signs of neurologic deficit.

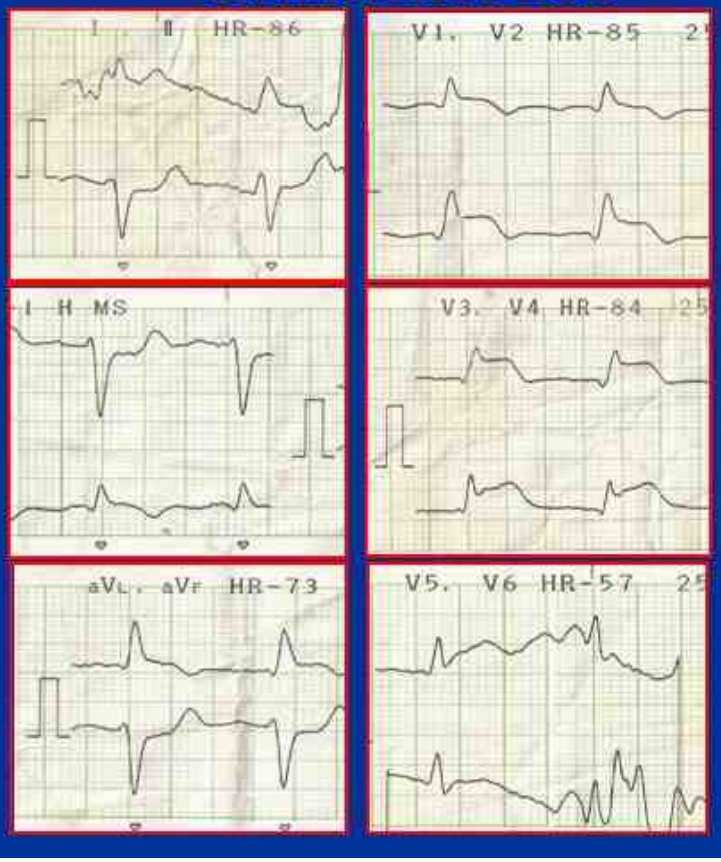
G.M. 74 y.o.

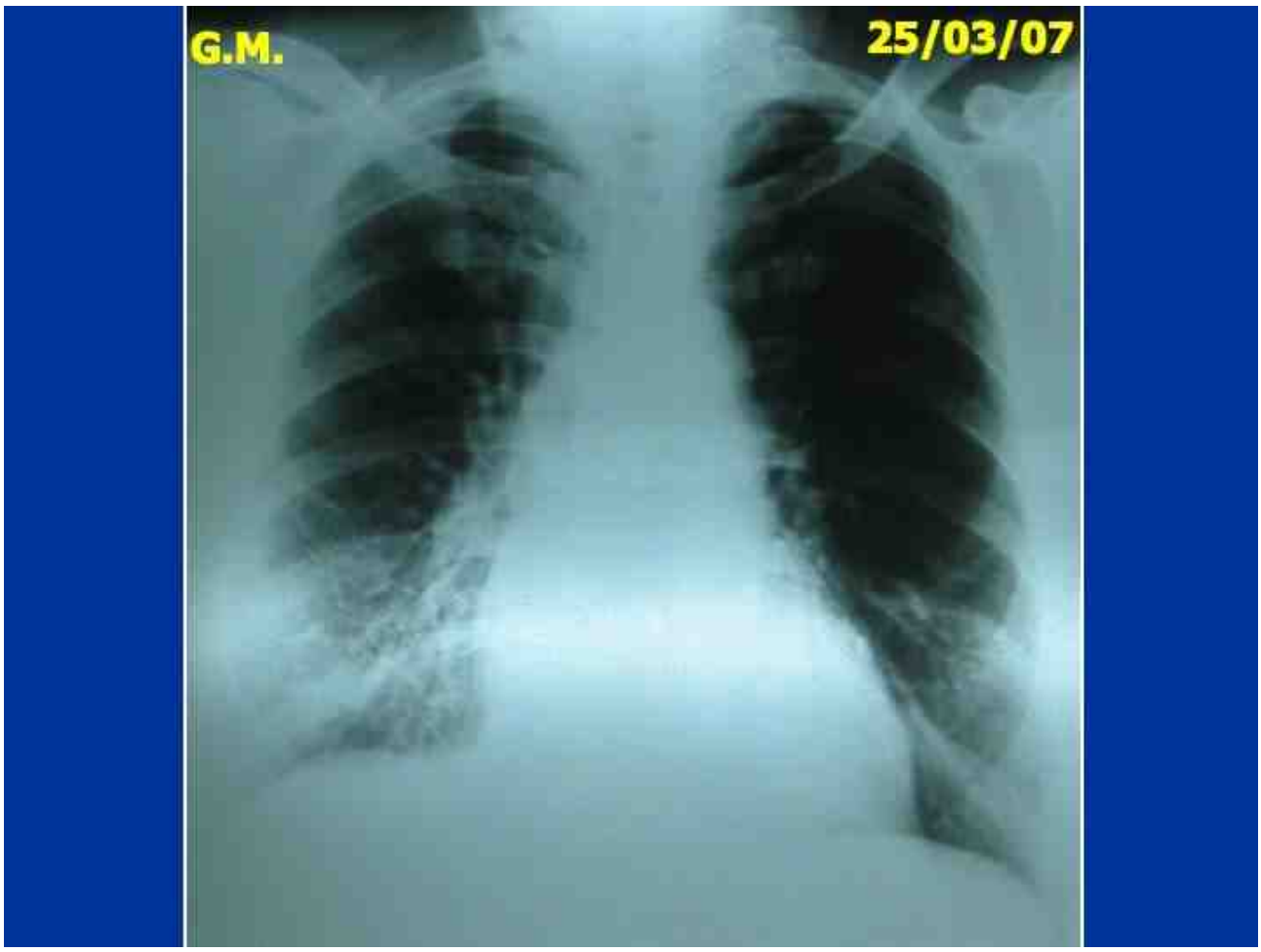
Referral ECG



G.M. 74 y.o.

Admittance ECG




G.M.
25/03/07

Evolution

- She is admitted into the hemodynamics lab at 18.30 hrs (window of 22 hrs. 30 min.) with 10/10 pain and signs of heart failure (KKC of Killip class). Coronary angiography is performed, with evidence of subocclusive lesion (99%) in the proximal third of ADA. Rescue PTCA is performed, which fails (TIMI II).
- She evolves with cardiogenic shock, requiring high doses of inotropic agents (dopamine and noradrenaline), mechanical respiratory assistance and intra-aortic balloon pump counterpulsation.
- At 21.05 hrs she presents cardiorespiratory arrrest in a setting of electric activity without pulse without reponse to advanced resuscitation maneuvers. Death is verified at 21.35 hrs.

Supplementary tests

- **Coronary angiography:**

Ostium and trunk without signicant lesions.

Subocclusive lesion (99%) in proximal third of aDA. In the middle third there was another significant segmentary lesion (90%).

70% lesion in circumflex artery. Dominant right coronary artery. No significant lesions.

Left ventriculography in RAO: severely increased end-diastolic volume and end-systolic volume. Anteromedial, anteroapical, apical, inferoapical, and inferomedial akinesia. Severe impairment of ventricular function.

Lab

	25/3/07
Hematocrit	43%
White cells	15.800/mm3
Platelets	234.000/mm3
Glycemia	2.37 mg/dL
Urea	33 mg%
CK	1060
CK MB	256
PT/KPTT	99% / 32 sec

Lab

	25/3/07
pH	7.40
PCO2	32.8 mmHg
PO2	52.1 mmHg
HCO3	20.9 mmol/L
BE	-2.1 mmol/L
Sat%	87.7%
Na+	137 mEq/L
K+	4.8 mEq/L
Cl-	100 mEq/L

Metabolic acidosis with increased GAP (17) plus respiratory alkalosis.