Post PTCA with dyspnoea

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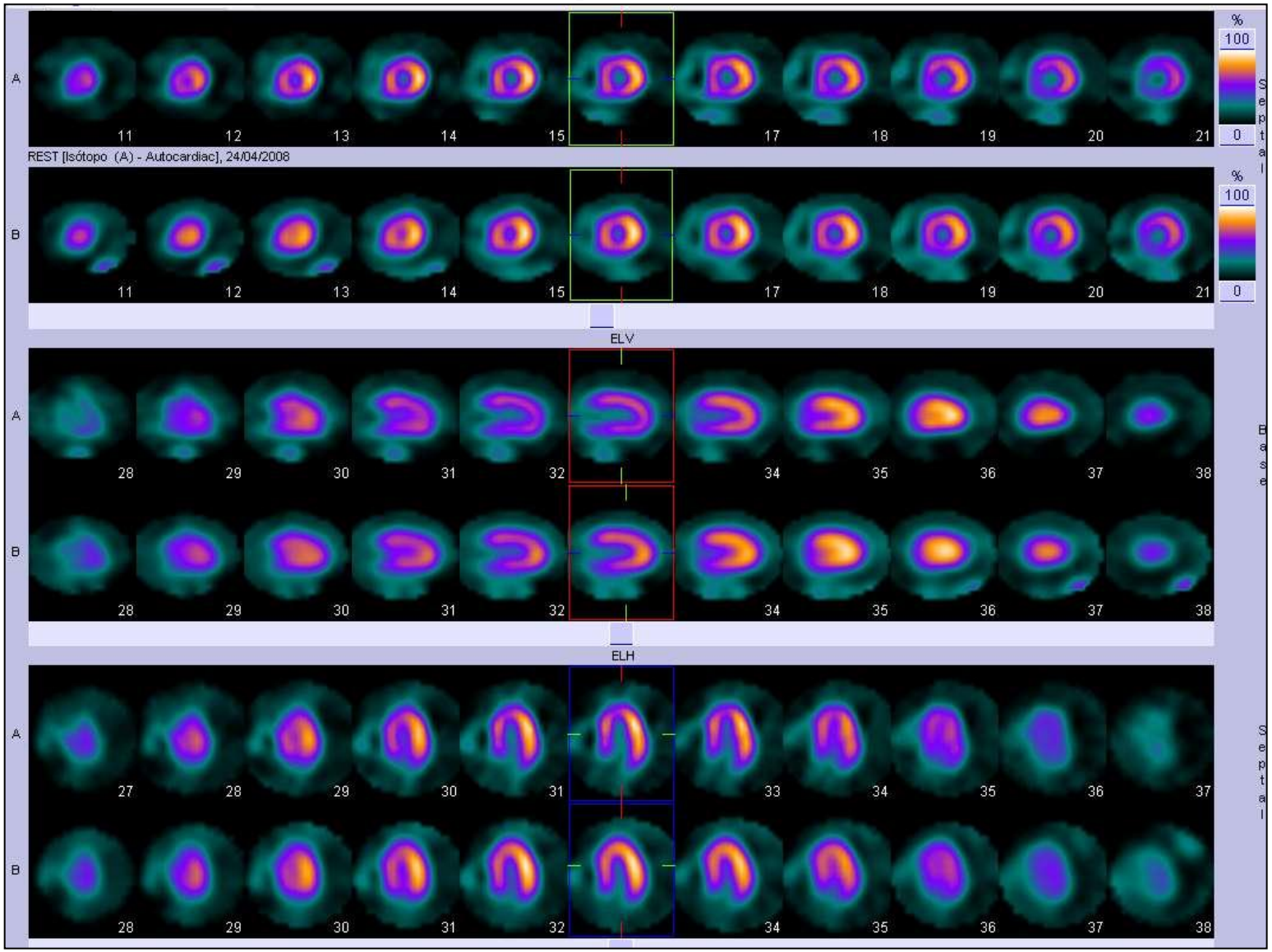
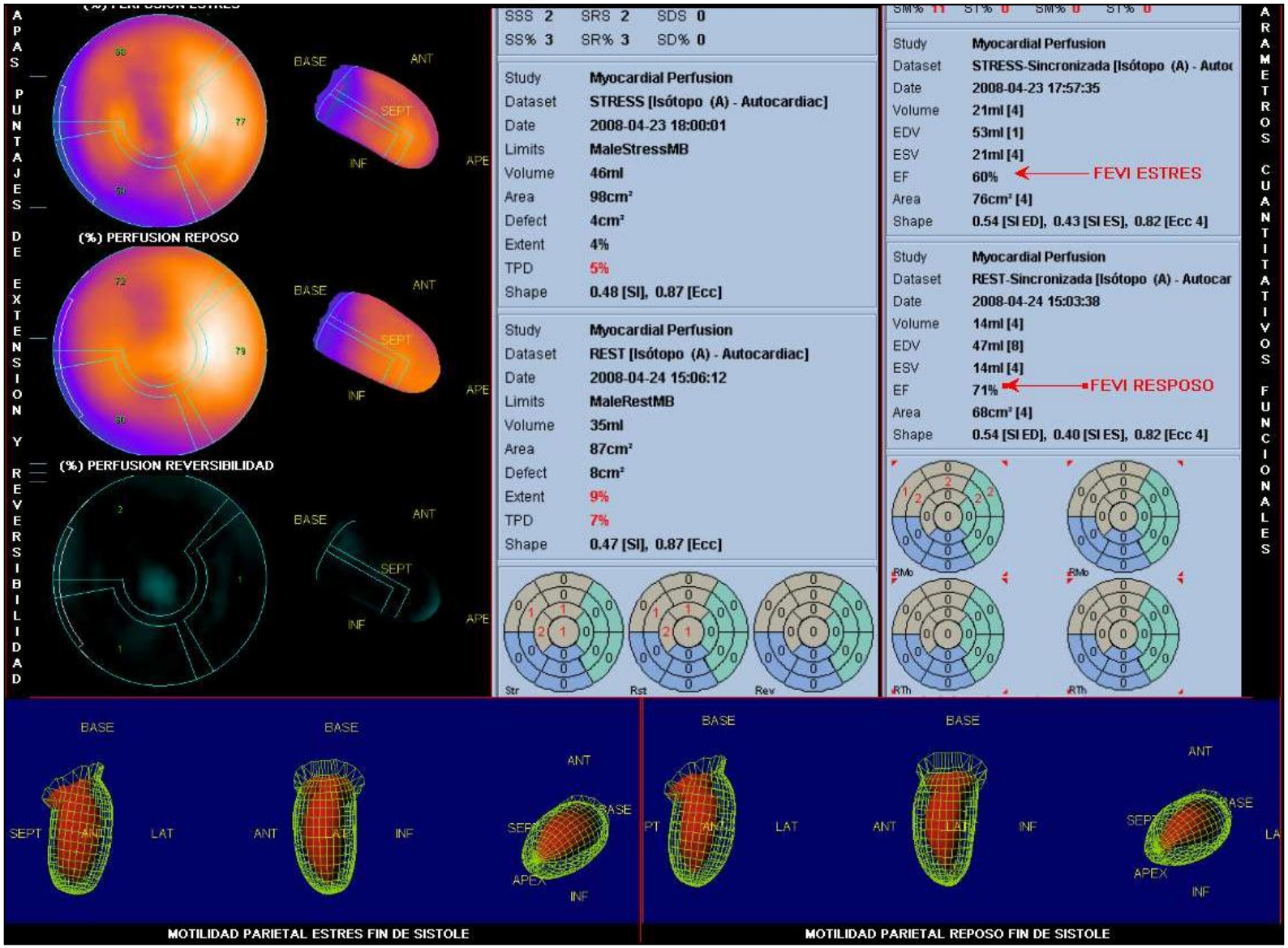
Clinical history

- 62 y.o. man.
- Previous PTCA with stents (ADA, Cx) 8 months before.
- Exerptional dyspnea, no chest pain.
- No EKG changes.
- Unable to exercise (knee prosthesis).
- Myocardial perfusion study (MPI) with dipyridamole.

Myocardial perfusion study



Quantitation of perfusion and function



With these results, you would:

a) Keep medical treatment, no further measures.

b) Send the patient to catheterization.

c) Indicate a CT-angiography.

d) Order a stress echocardiogram.

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- Although no clear segmental ischemia is observed, there is transient ischemic dilation of the LV which can indicate balanced ischemia.
- The drop in post-stress LVEF could be due to stunning.
- In a patient with known CAD and PTCA, these findings give reason for catheterization with no further delay.

Restenosis usually occurs:

a) Within 1 to 3 months after PTCA.

b) Within 3 to 9 months after PTCA.

c) Within 9 to 12 months after PTCA.

d) After 12 following PTCA.

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- Although increasingly complex lesions and higher-risk patients are being successfully treated percutaneously, restenosis and disease progression continue to cause significant morbidity.

Coronary angiography

The patient underwent coronary angiography, showing:

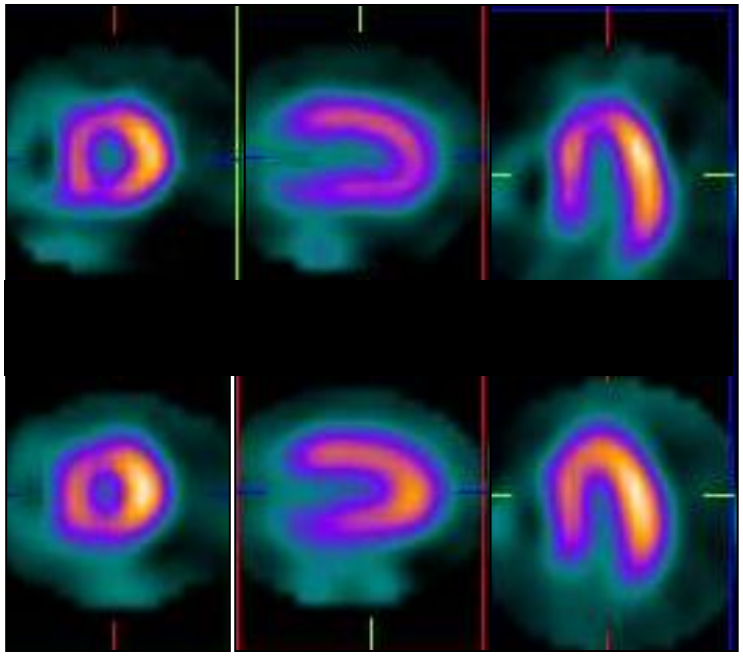
- Restenosis, LAD.
- Restenosis, LCx.
- 90% lesion, proximal RCA.

CABG recommended, on waiting list.

Teaching points

- Restenosis occurs in approximately one-third of patients undergoing PTCA, one-half of whom presents with symptoms.
- Functional imaging performed before 6 months of the procedure can yield false–positive results due to lack of recovery of coronary flow reserve .
- Non-invasive imaging is indicated after PTCA if atypical chest pain or other non-specific symptoms appear, or an exercise test is non-diagnostic / equivocal.

Teaching points



- Transient ischemic dilation (TID) is frequently related to balanced ischemia, which in turn is associated with multivessel disease.
- A drop in post-stress LVEF can reflect myocardial stunning and is related with increased risk of cardiac events.

Bibliography

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