Recognizing Angina: A Forgotten but Pivotal Part of Evaluation and Therapy

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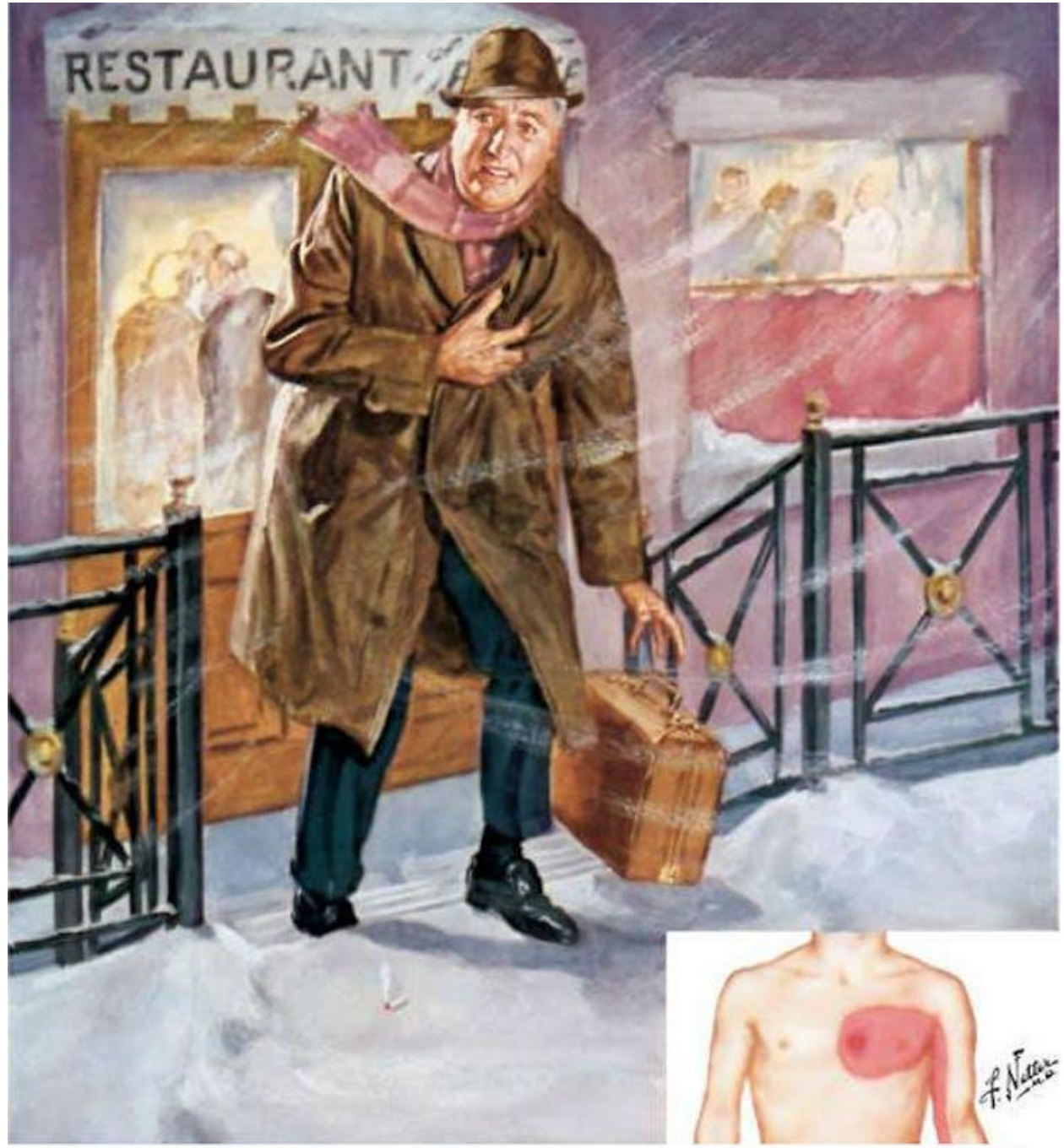
Angina:

"Those who are afflicted with it, are seized while they are walking (more especially if it be uphill, and soon after eating) with a painful and most disagreeable sensation in the breast, which seems as if it would extinguish life if it were to increase or to continue; but the moment they stand still, all this uneasiness vanishes."

W. Heberden, 1772.



Not all angina is classic but we should consider if the expression of the symptom makes sense from our understanding of cardiac physiology, ischemia and neural expression.

Forty years ago, I said the history of the patient should document:

- Location
- Onset
- Radiation
- Duration
- Intensity
- Relieving and exacerbating factors
- Character
- Provocation

Location

- Substernal
- Arm
- Epigastric
- Jaw
- Back–shoulder–neck

Character of Discomfort

- Pain
- Tightening
- Squeezing
- Fullness

- NOT sharp or stabbing

Discomfort

Duration – Minutes; not a few seconds

Area – Size of the palm of the hand; not a pinpoint

Consistency – Similar levels of exertion produce the discomfort

The likelihood of having true angina (consider Bayes Theorem)

The likelihood of the discomfort being true or false depends on the prevalence of disease in the population.
i.e. a 40-year-old woman compared with a 60-year-old man with diabetes.

Listen to the patients. Don’t lead them.

Consider trying to reproduce the discomfort by having the patients perform the activity they say causes it.

That is the way it used to be done.

Now it is looking at the angiogram and ascribing the discomfort to the lesion you see.

This is working backwards.

What have we learned about chronic angina and revascularization?

From the COURAGE Trial to the ISCHEMIA Trial for most patients:
No difference in cardiac events with revascularization.

Guidelines for chronic coronary disease:
Revascularization is recommended for symptom relief.

Does revascularization relieve symptoms?

Patients in the ISCHEMIA trial had greater symptom relief with revascularization but many continued to have symptoms.

Was the relief partly due to the placebo effect?

What if the placebo effect is removed?

The ORBITA-2 Trial used a sham control to blind the patient to whether revascularization was done.

Total freedom from angina was achieved in 40% of the PCI group and 15% in the placebo group.

Rajkumar CA, Al-Lamee RK, et al. A Placebo-controlled Trial of Percutaneous Coronary Intervention for Stable Angina. N Engl J Med 2023;389:2319-2330.

Which patients had symptoms relieved?

The ORBITA-2 substudy of the nature of the discomfort at baseline.

Patients were classified as having Rose angina and “typical angina”, or not.

Simader, F, Rajkumar, C, Foley, M. et al. Symptoms as a Predictor of the Placebo-Controlled Efficacy of PCI in Stable Coronary Artery Disease. JACC. 2024 Jul, 84 (1) 13–24.

World Health Organization
Rose Angina

“Chest pain induced by walking on the level or uphill resulting in the patient slowing down or coming to a complete stop with pain subsiding within 10 minutes. Pain location must be within the sternum or within the left chest and or the left arm.”

ORBITA-2

Nature of symptoms at baseline

64% had Rose Angina
66% had “typical angina”
(34% had nontypical discomfort)

ORBITA-2

Symptom improvement with revascularization was poorly related to the coronary anatomy or ischemic markers. However:

Rose angina and typical angina were excellent predictions of the efficacy of PCI while other symptoms were not.

CONCLUSIONS

You can’t relieve angina if you don’t have angina.

Selection of the right patients to achieve improvement in symptoms should occur at the beginning of the clinical assessment, not after looking at the angiogram.