INOCA, ANOCA: Step-By-Step Approach in 2025

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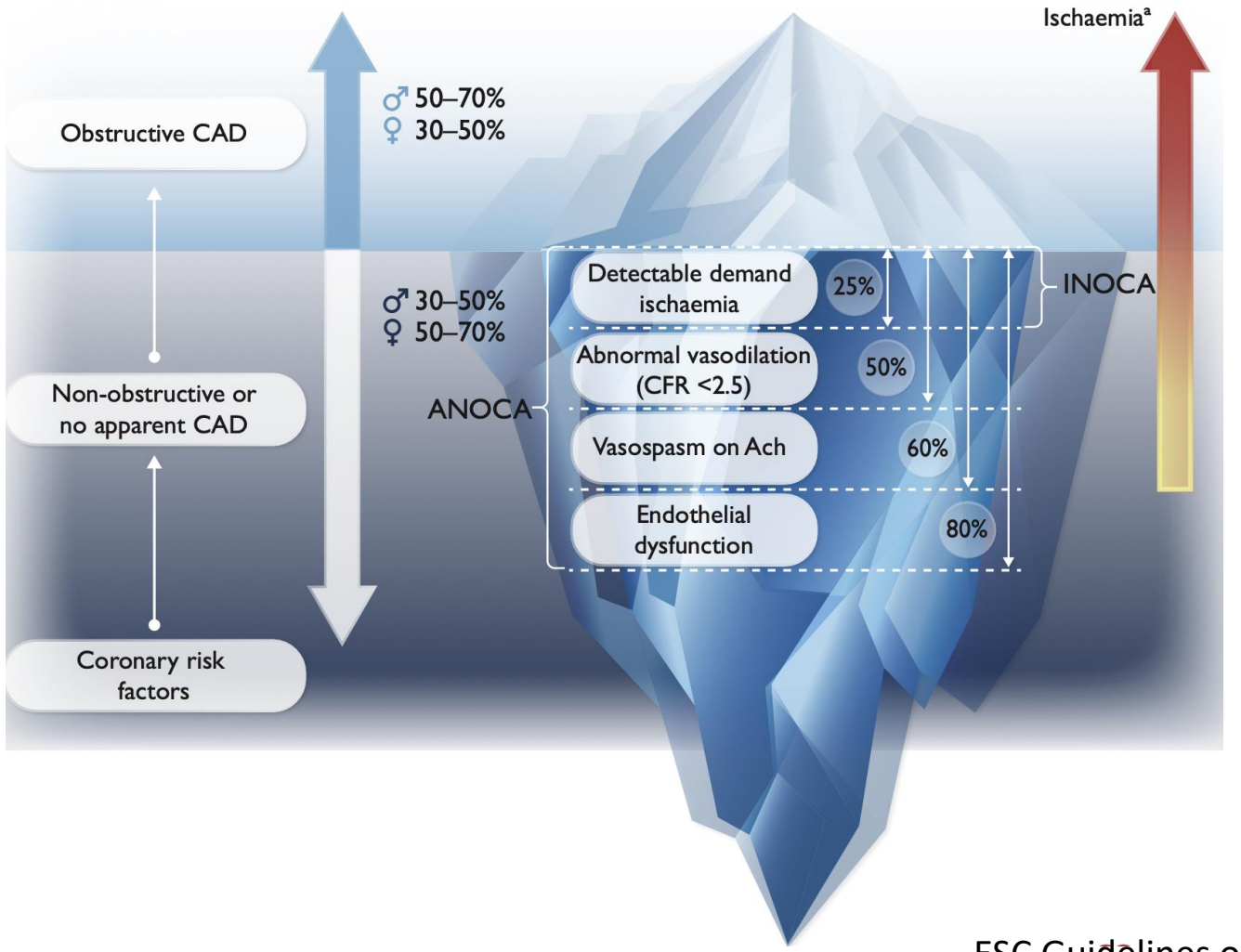
Disclosures

Speaker's name: Javier Escaned

Speaker at educational events: Abbott, Abiomed, Boston Scientific, Medis, ShockWave Medical, Philips.

Advisory board: Abbott, Boston Scientific, Philips

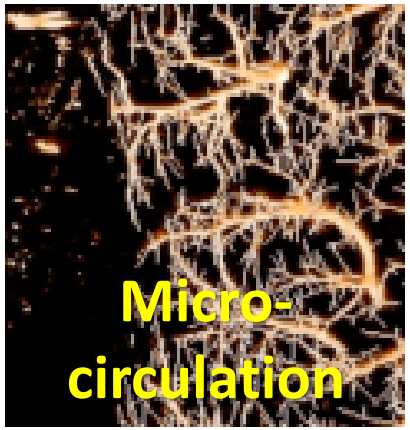
The iceberg of myocardial ischaemia



ESC Guidelines on Cronic Coronary Syndrome 2024

Escaned J, Serruys PW. Coronary Stenosis: Imaging, Structure and Physiology PCR Books 2015

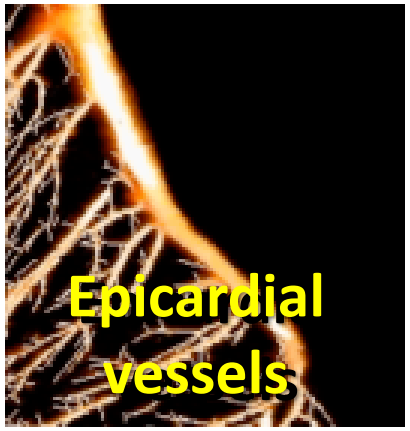
Epicardial vessels and microcirculation in clinical practice

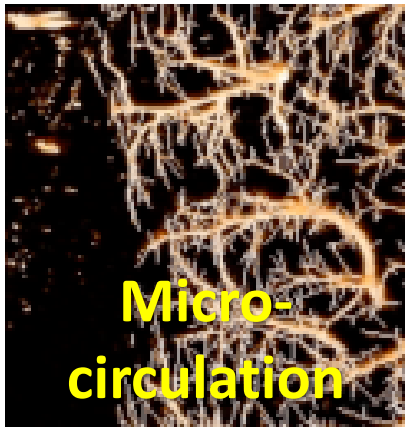


Investigated and treated
(stenoses only)

Largely ignored and
not treated

The coronary circulation: what should we look for in patients with chronic coronary syndromes?





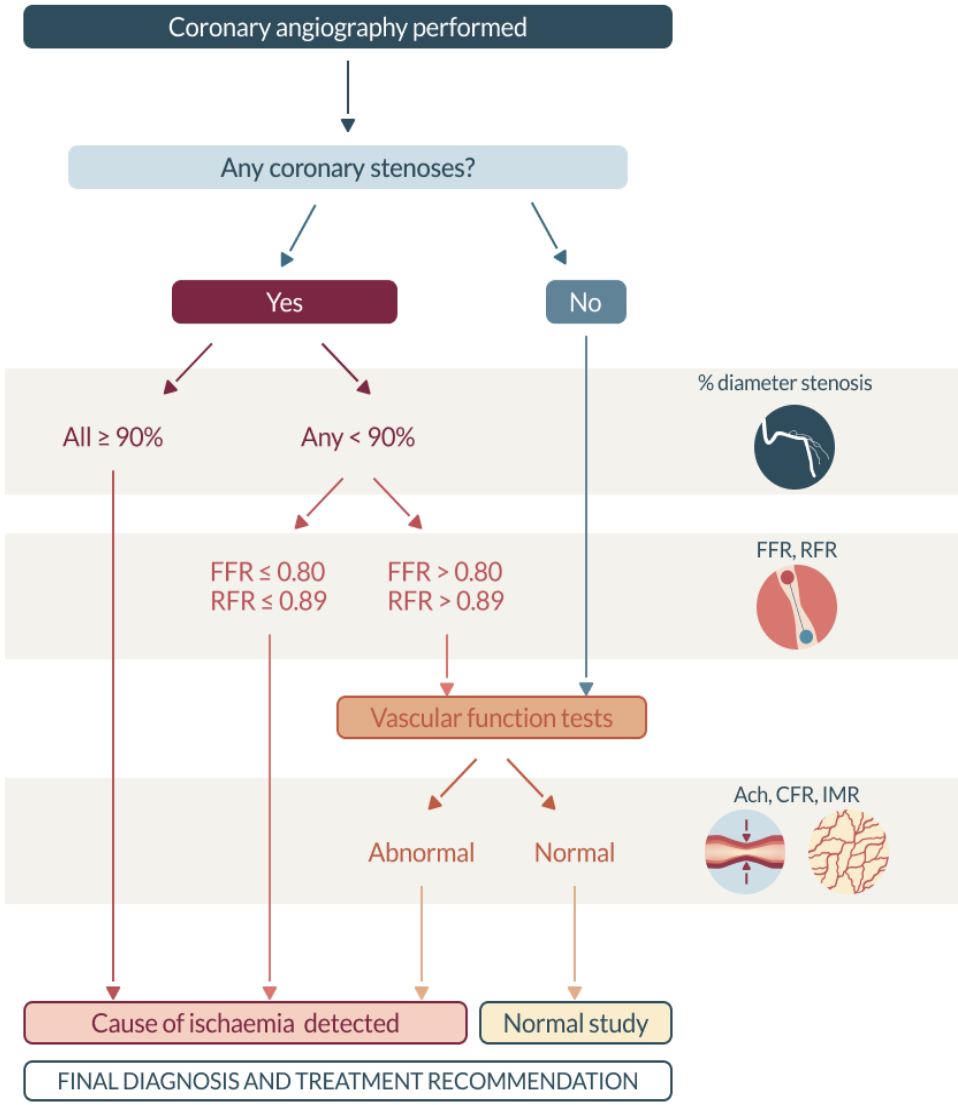
Flow-limiting epicardial stenoses

Structural changes in the microcirculation (arteriolar thickening, decreased density of capillaries)

Vasomotor disorders (epicardial or microvascular spasm, endothelial dysfunction)

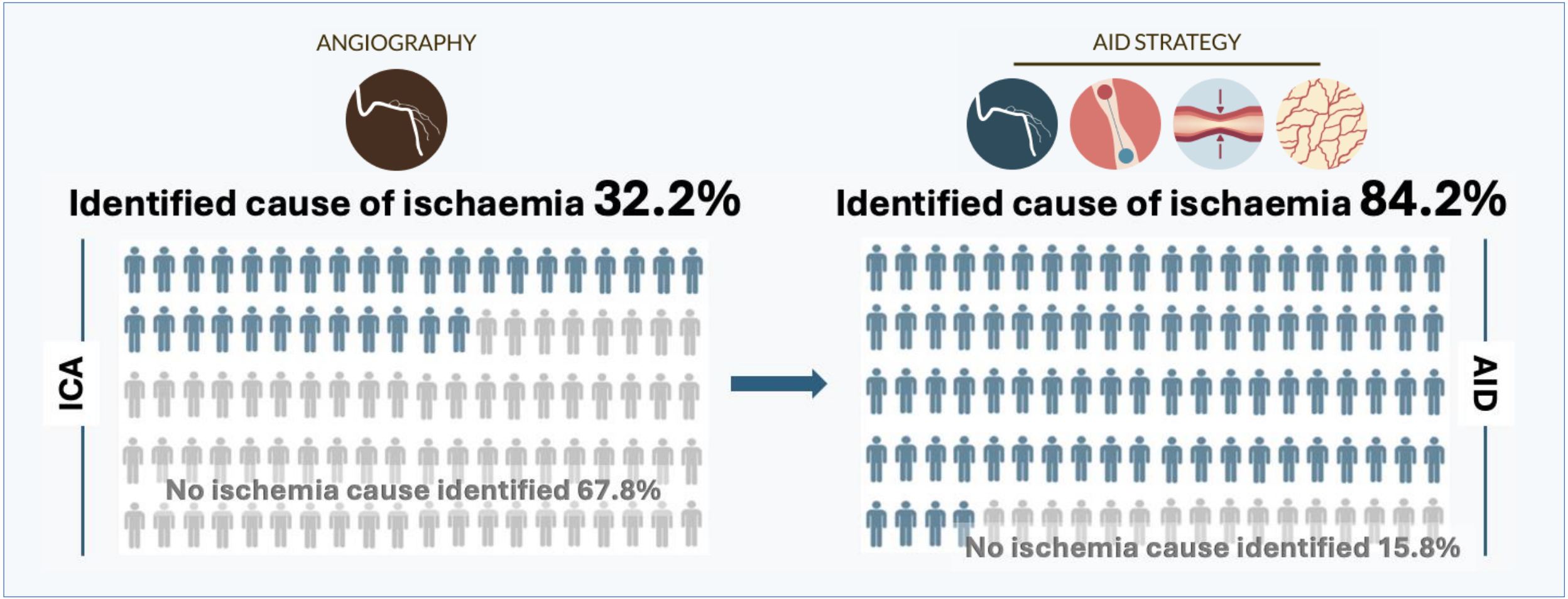
A stepwise approach for physiological assessment in CCS

- Assessment of the cause of ischaemia in CCS can be done invasively using a hierarchical strategy supported by guidelines.
    - ICA to diagnose ≥90% stenoses (visually assessed)
    - FFR / RFR to assess <90% stenoses
    - Coronary flow reserve (CFR) and microvascular resistence (IMR) to identify structural cause of INOCA
    - Acetylcholine test to assess vasomotor cause of INOCA.
- The multicenter AID-ANGIO study investigated the value of this strategy in 350 CCS patients.
- It took only 15 additional minutes to invasive angiography and proved safe.



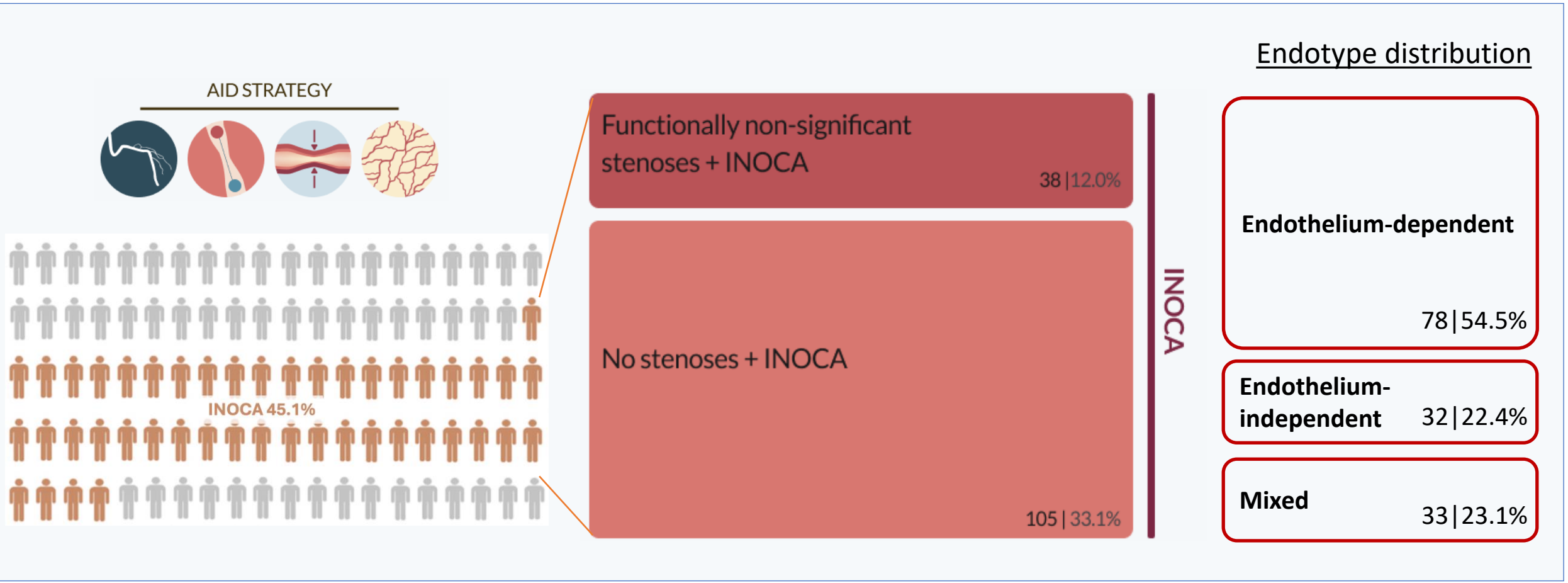
Jeronimo A, Escaned J et al. EuroIntervention. 2025 Jan 6;21(1):35-45

Essential results: Improvement in diagnostic yield



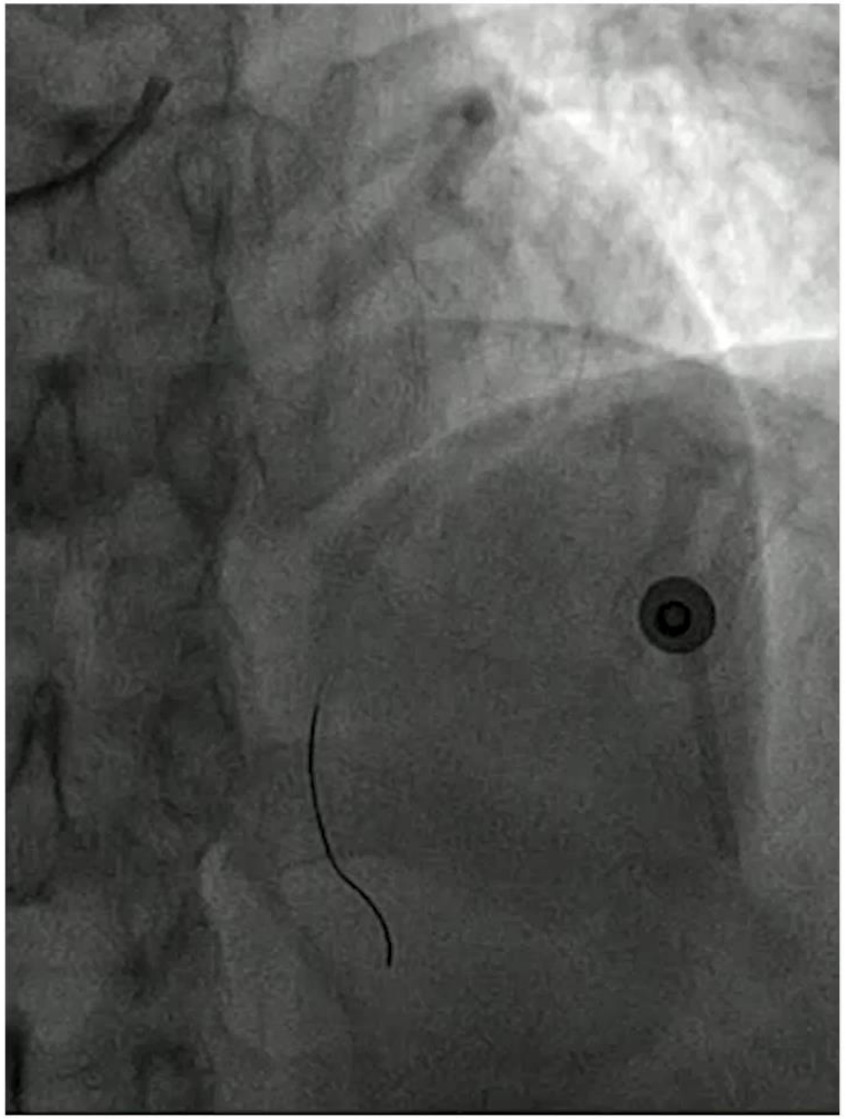
2.6-fold increase in diagnostic yield with AID strategy, compared to ICA ($p<0.001$)

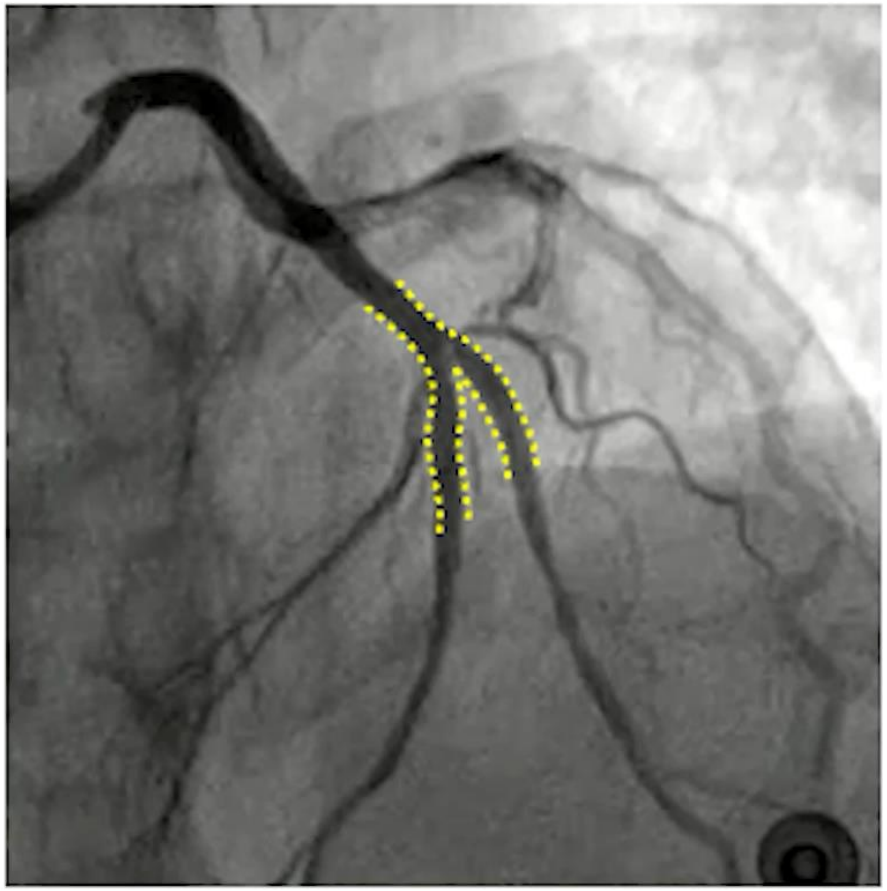
Prevalence of INOCA based on AID strategy



INOCA contributed to higher diagnostic yield of AID strategy, also in non-significant stenoses

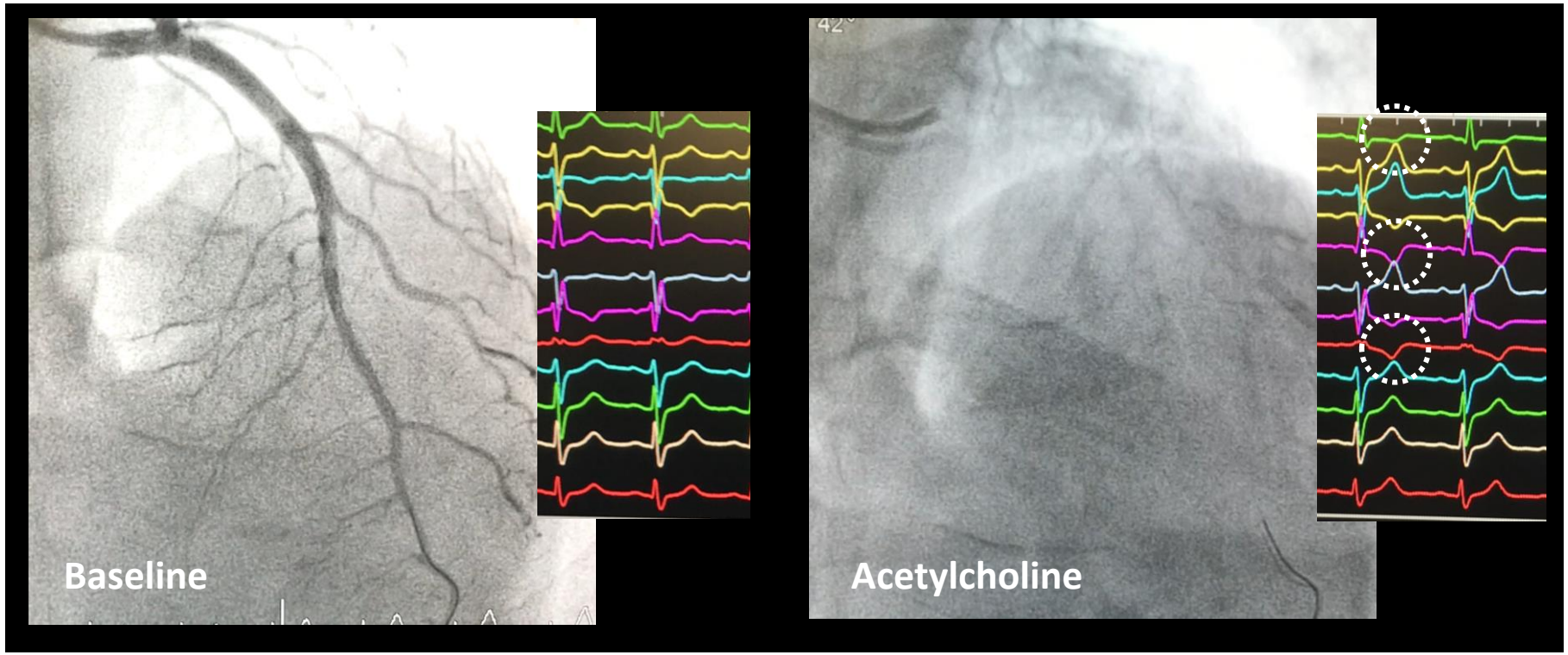
Comprehensive assessment of ischaemia in the cathlab





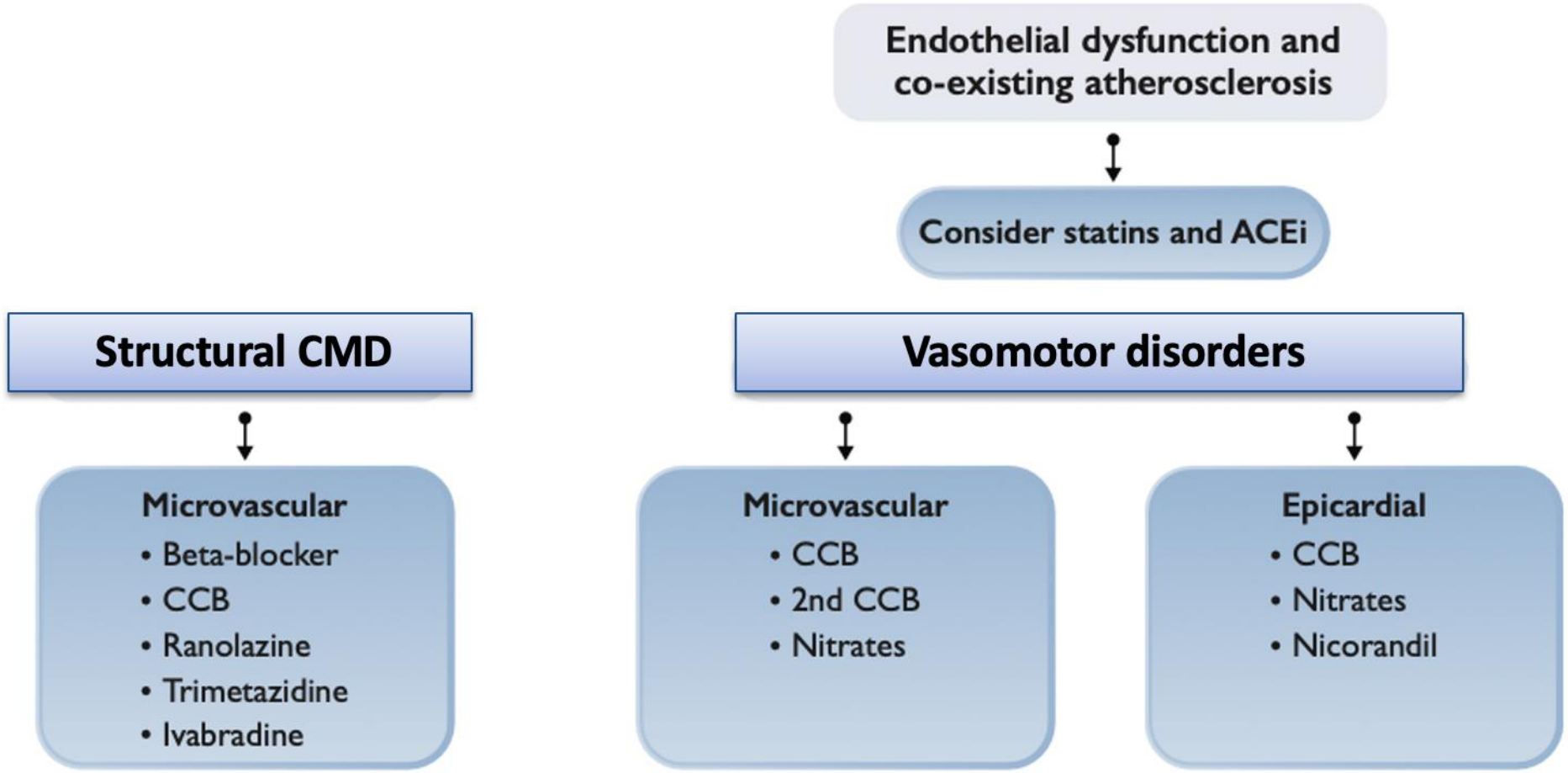
Female patient with persistance of angina one year after PCI (two-stent technique LAD/Dx bifurcation)

Myocardial bridges and INOCA



We are now aware that myocardial spasm frequently occurs in MB. This has implication from medical Tx (BB vs CCB).

Stratified INOCA treatment according to findings



ESC Guidelines on Cronic Coronary Syndrome 2024 (modified terminology)

Thank you for your attention

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