ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation: Addenda

The Task Force for the management of acute coronary syndromes (ACS) in patients presenting without persistent ST-segment elevation of the European Society of Cardiology (ESC)

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Addendum 1. References

2.1 Epidemiology


3.1 Clinical presentation

3.2 Diagnostic tools


4.2 Electrocardiogram indicators


4.3 Biomarkers


4.4 Risk scores


5.1 Anti-ischaemic agents


5.2 Antiplatelet agents


### 5.3 Anticoagulants

- Comparison of two treatment durations (6 days and 14 days) of a low molecular weight heparin with a 6-day treatment of unfractionated heparin in the initial management of unstable angina or non-Q wave myocardial infarction: FRAXIS.LS. (FRAXiparine in Ischaemic Syndrome). *Eur Heart J* 1999;20:1553–1562.
5.4 Coronary revascularization


5.5 Special populations and conditions


## Goals of secondary prevention after an ACS/NSTEMI

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Goal</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smoking</strong></td>
<td>Smoking cessation, No exposure to environmental tobacco (i.e. passive smoking)</td>
<td>• Record smoking status at every visit.</td>
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<td></td>
<td></td>
<td>• Advise to quit smoking and to avoid environmental tobacco smoke.</td>
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<td>• Develop a plan for smoking cessation. Consider special programmes, pharmacotherapy (i.e. nicotine replacement, bupropion)</td>
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<tr>
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<td>• Ask about smoking status in every patient.</td>
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<td></td>
<td></td>
<td>• Assess the degree of addiction and readiness to quit smoking.</td>
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<td></td>
<td></td>
<td>• Advise unequivocally to quit smoking.</td>
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<tr>
<td></td>
<td></td>
<td>• Assist with smoking cessation strategy including behavioural counselling, nicotine replacement therapy and pharmacological intervention.</td>
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<tr>
<td><strong>Hypertension</strong></td>
<td>&lt;140/90 mm Hg  &lt;130/90 mm Hg in patients with diabetes and chronic renal disease</td>
<td>• Lifestyle modification with increased physical activity, sodium reduction, healthy diet, alcohol moderation, low-fat dairy products</td>
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<td></td>
<td>• Blood pressure-lowering drugs if blood pressure ≥140/90 mm Hg.</td>
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<td></td>
<td></td>
<td>• Blood pressure medication, preferably with β-blocker and/or ACE inhibitors/ ARBs.</td>
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<tr>
<td></td>
<td></td>
<td>• Antihypertensive treatment is justified in patients with CVD and blood pressure 130–139/85–89 mm Hg.</td>
</tr>
<tr>
<td><strong>Hyperlipidaemia</strong></td>
<td>LDL-C &lt;70 mg/dl when feasible</td>
<td>• Statin therapy with target LDL-C levels &lt;1.8 mmol/L (&lt;70 mg/dL) initiated early after admission is recommended.</td>
</tr>
<tr>
<td><strong>Physical Inactivity</strong></td>
<td>Regular aerobic exercise &gt;30 min per day on most days of the week</td>
<td>• Assess the risk with a physical activity history and/or an exercise test to guide prescription.</td>
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<tr>
<td></td>
<td></td>
<td>• Encourage 30–60 min of moderate-intensity aerobic activity on most, preferably all, days of the week supplemented by an increase in daily lifestyle activities.</td>
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<tr>
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<td></td>
<td>• Encourage resistance training 2 days per week.</td>
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<td></td>
<td></td>
<td>• Advise medically supervised programmes for high-risk patients (e.g. recent acute coronary syndrome or revascularization, heart failure)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 30 min of moderately vigorous exercise on most days of the week.</td>
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<tr>
<td><strong>Overweight/obesity</strong></td>
<td>Weight reduction BMI 18.5–24.9 Waist circumference: men &lt;94 cm women &lt;80 cm.</td>
<td>• Assess BMI and/or waist circumference on each visit and consistently encourage weight maintenance/reduction through an appropriate balance of physical activity, caloric intake, and formal behavioural programmes to maintain/achieve a BMI between 18.5 and 24.9.</td>
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<tr>
<td></td>
<td></td>
<td>• If waist circumference is &gt;80 cm in women and &gt;94 cm in men initiate lifestyle changes and consider treatment for metabolic syndrome as indicated.</td>
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<td>• Weight reduction if BMI ≥35, especially if BMI ≥30</td>
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<td></td>
<td>• No further weight gain if waist circumference 80–88 cm in women and 94–102 cm in men</td>
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<tr>
<td></td>
<td></td>
<td>• Advise weight loss if waist circumference &gt;88 cm in women and &gt;102 cm in men.</td>
</tr>
<tr>
<td><strong>Diabetes</strong></td>
<td>HbA1c &lt;7% HbA1c &lt;6.5% fasting glucose &lt;6 mg/dL post-prandial &lt;7.5 mg/dL</td>
<td>• Initiate lifestyle and pharmacotherapy to achieve near-normal HbA1c levels.</td>
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<td></td>
<td>• Begin vigorous modification of other risk factors.</td>
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<td></td>
<td>• Instruct patients to perform regular self-monitoring of blood glucose levels.</td>
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<td></td>
<td>• Emphasis on lifestyle counselling and weight reduction</td>
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<td></td>
<td>• Aggressive risk management: blood pressure &lt;130/80 mm Hg, total cholesterol &lt;175 mg/dL (≤155 mg/dL if feasible), LDL cholesterol &lt;100 mg/dL (≤80 mg/dL if feasible).</td>
</tr>
<tr>
<td><strong>Nutrition</strong></td>
<td>Healthy diet</td>
<td>• Wide variety of food</td>
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<td>• Energy intake adjusted to avoid overweight</td>
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<td>• Encourage fruits, vegetables, wholegrain cereals, bread, and fish (especially oily), lean meat, low-fat dairy products.</td>
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<td>• Replace saturated fats with monounsaturated and polyunsaturated fats (vegetable and marine)</td>
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<td>• Hypertensive subjects should reduce salt intake.</td>
</tr>
</tbody>
</table>

ACE = angiotensin-converting enzyme; ACS = acute coronary syndrome; ARB = angiotensin receptor blocker; BMI = body mass index; CVD = cardiovascular disease; HbA1c = glycated haemoglobin; LDL-C = low-density lipoprotein cholesterol; NSTEMI = non-ST-segment elevation myocardial infarction.