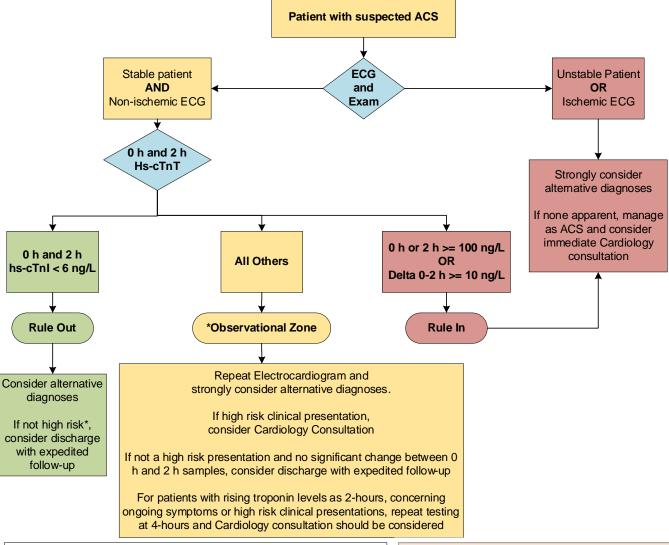


Chest Pain Pathway for Troponin I, High Sensitivity - Vidas - Calgary Urgent Care and Rural Hospital

Leaders in Laboratory Medicine

(Airdrie, Banff, Chumir, Cochrane, Okotoks, South Calgary)



Note:

* For all patients with abnormal hs-cTnl results, check the medical record for prior results. Many patients have stable abnormalities in hs-cTnl and measured concentrations similar to the patient's baseline are reassuring.

ESC 2015 Guidelines advise that patients are unlikely to have an acute MI if:

- hs-cTn < Upper Limit of Normal (i.e. hs-cTnl < 19 ng/L) AND,
- >6 hrs since symptom onset AND,
- -pain-free AND,
- the clinical presentation is Low Risk

However, coronary ischemia has not been definitively excluded and unstable angina must be considered. Disposition after a single hs-cTnl < 19 ng/L should only be considered for low risk patients with

> 6 hrs since symptom onset and should be used cautiously.

All patients presenting less than 6-hours since symptom onset, with active symptoms or presentations that are not clearly low risk should have repeat hs-cTnl testing at 2 hours. For patients with rising troponin levels at 2-hours, concerning ongoing symptoms, or high risk clinical presentations, repeat testing at 4-hours and Cardiology consultation should be considered. Consider using a structured risk assessment tool such as the HEART score to aid risk stratification for all patients.

HEART Score Calculation				
History	Highly suspicious		2	
	Moderately suspicious		1	
	Slightly suspicious Significant ST-depression		2	
ECG	Non-specific repolar	1		
	Normal		0	
Age	≥ 65 years		2	
	45 – 64 years ≤ 44 years		0	
Risk Factors	☐ Diabetes ☐ Current smoker ☐ HTN (diagnosed) ☐ HL (diagnosed) ☐ Family hx CAD ☐ Obesity	≥ 3 risk factors or history of atherosclerotic disease	2	
		No risk factors known	0	
hs-cTnT (Peak)	> 3x normal limit (43ng/L or greater)		2	
	1-3x normal limit (14-42ng/L)		1	
	< normal limit (<14ng/L)		0	
Total (10 maximum)				
HEART Score Interpretation				
Low Risk				0-3
Moderate Risk				4-6
High Risk				7-10