

## Heparin-Induced-Thrombocytopenia - Full Clinical Guideline

Reference no.: CG-ICU/2019/039

### 1. Introduction

To aid the clinician in diagnosing HIT

### 2. Aim and Purpose

The calculation of the HIT score, when taking the clinical situation into context this would suggest the likelihood of this diagnosis.

### 3. Definitions, Keywords

HIT, Heparin, platelets, thrombosis, thrombocytopenia

### 4. Main body of Guidelines

| Element                 | The 4T score for heparin-induced thrombocytopenia   | Point |
|-------------------------|---|-------|
| <b>Thrombocytopenia</b> | 2 points if the fall in platelet count is >50% of the previous value, or the lowest count (nadir) is $20-100 \times 10^9/\text{liter}$                |       |
|                         | 1 point if the fall is 30–50% or the nadir is $10-19 \times 10^9/\text{liter}$  |       |
|                         | No points if the fall is less than 30% or the nadir is $<10 \times 10^9/\text{liter}$ .   |       |
| <b>Timing</b>           | 2 points if the fall is between days 5–10 after commencement of treatment   |       |
|                         | 1 point if the fall is after day 10.  |       |
|                         | If someone has been exposed to heparin within the last 30 days and then has a drop in platelet count within a day of re-exposure, 2 points are given. |       |
|                         | If the previous exposure was 30–100 days ago, 1 point   |       |
|                         | If the fall is early but there has been no previous heparin exposure, no points.  |       |
| <b>Thrombosis</b>       | 2 points in new proven thrombosis, skin necrosis (see below), or systemic reaction  |       |
|                         | 1 point if progressive or recurrent thrombosis, silent thrombosis or red skin lesions   |       |
|                         | No points if there are no symptoms.   |       |

|                                   |   |
|-----------------------------------|---|
| <b>Alternative cause possible</b> | 2 points if no other cause                          |
|                                   | 1 point if there is a possible alternative cause    |
|                                   | No points if there is a definite alternative cause. |
|                                   | <b>TOTAL SCORE</b>                                  |

A score of 0–8 points is generated; if the score is 0–3, HIT is unlikely. A score of 4–5 indicates intermediate probability, while a score of 6–8 makes it highly likely. Those with a high score may need to be treated with an alternative drug while more sensitive and specific tests for HIT are performed, while those with a low score can safely continue receiving heparin as the likelihood that they have HIT is extremely low.

NB: Not all laboratories use the same samples. Best to draw 1 purple, 1 yellow, 1 red and 1 blue and to discuss the case with the Haematologist on call.

**5. References (including any links to NICE Guidance etc.)**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2600013/> accessed 12.9.19

**6. Documentation Controls**

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|---------------------------|---|
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