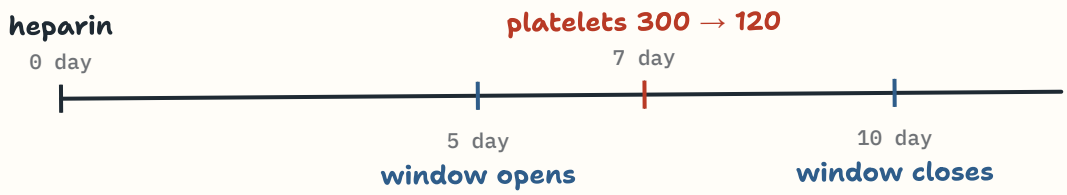
HIT in one page

Why a low platelet count clots



Step by step

1. Heparin binds PF4; IgG against the complex forms
2. IgG engages FcγRIIa and platelets activate
3. Degranulation releases more PF4: a loop
4. Microparticles, thrombin surge: thrombosis
5. Stop all heparin; start a non-heparin anticoagulant

T	2 points
Thrombocytopenia	Fall of more than 50 %, nadir ≥ 20 × 10^9/L
Timing	Onset at 5 to 10 days
Thrombosis	New thrombosis
oTher causes	None
Total	0–3 low, 4–5 intermediate, 6–8 high

The 4Ts (score 0–2 each)

Rule of thumb

Platelets fall, thrombin surges: clot, not bleed

Screen: immunoassay. Gold standard: serotonin release assay

Risk: UFH more than LMWH; fondaparinux essentially none

Exam traps

- Low platelets on heparin do not mean bleeding: look for thrombosis.
- Stop all heparin, LMWH included.
- Type 1 HIT is non-immune and settles on its own; type 2 is the dangerous one.
- Recent heparin in the last month: the fall can come within a day.

Heparin-induced thrombocytopenia: why a low count clots

Video, written lesson, practice question and sources: medservatory.com/usmle-step-1/haematology-oncology/heparin-induced-thrombocytopenia

For exam study only, not medical advice. Follow local guidelines and your lab's ranges.
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