

VTE in pregnancy

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THE STORY IN ONE SENTENCE

Pregnancy makes blood clot more easily, so clots can form in leg veins and break off into the lungs.

“VTE in pregnancy means give low-molecular-weight heparin (LMWH, a daily shot that safely thins the blood). Do NOT give warfarin (pills that cross the placenta and harm the baby) or DOACs (newer pills that lack pregnancy safety data). Keep giving LMWH for at least 6 weeks after delivery — the clot risk stays high until the body fully resets.”

Normal anatomy — the body's job

Normally, your blood stays liquid as it flows through your veins and arteries, but the moment you get a cut, tiny sticky patches called platelets rush to the wound and clotting proteins in the blood knit together into a solid plug that stops the bleeding. This system — called hemostasis — has to stay perfectly balanced: clot too little and you bleed; clot too much and clots form inside healthy blood vessels and block flow.

BODY'S JOB

Blood must flow smoothly and quickly through every vein and artery to deliver oxygen and nutrients to tissues and carry waste away. At the same time, the clotting system has to stand ready — quiet and off until the second a blood vessel tears, then fast and strong enough to seal the leak. The balance is kept by clotting factors (proteins that build clots) and natural blood thinners (proteins that dissolve clots). If blood slows down, gets too sticky, or a vessel wall gets damaged, clots can form even when there's no cut — and that's the problem in pregnancy.

1. Blood flows quickly and smoothly through deep veins in your legs, pushed back up toward the heart by leg muscles squeezing the veins and one-way valves stopping it from falling backward.
2. Clotting proteins and platelets float quietly in the bloodstream, waiting for a signal — a torn blood vessel — to activate and form a plug.

3. Natural blood thinners, like protein C and protein S, patrol the blood and dissolve any tiny clots that start to form by accident, keeping the inside of blood vessels clean and open.
4. During pregnancy, the body deliberately tips the balance: it makes more clotting factors and fewer natural thinners, so blood clots faster and stronger — this protects you from bleeding too much during delivery.
5. At the same time, the growing uterus presses down on the big veins in your pelvis, slowing blood flow in your legs, and pregnancy hormones (especially estrogen and progesterone) relax vein walls and make blood even stickier — all of this makes clots more likely to form inside leg veins even though there's no injury.

What breaks

The normal clotting balance tips too far toward sticky, thick blood during pregnancy — clotting factors go up, natural blood thinners go down, blood flow in the legs slows under the weight of the uterus, and pregnancy hormones relax vein walls. All of this together makes clots form too easily inside deep leg veins, and if a clot breaks loose it can float up into the lungs and block oxygen.

CLINICAL TERM

Venous thromboembolism (VTE) in pregnancy — a clot in a deep leg vein (deep vein thrombosis) (DVT) or pulmonary embolism (a clot lodging in a lung artery) (PE) — caused by the hypercoagulable state of pregnancy (elevated fibrinogen, factors VII/VIII/X, and von Willebrand factor; decreased protein S), venous stasis from uterine compression of the iliac veins and inferior vena cava, and endothelial changes from hormonal effects (estrogen and progesterone).

How the body compensates

When a clot first forms in a leg vein or breaks off into the lungs, the body fights to keep oxygen delivery and blood pressure normal — the heart beats faster, breathing speeds up, and blood vessels tighten. Vital signs can look okay for a while, hiding how serious the clot is, but if the clot is large or keeps growing, the body's emergency measures can't keep up and the patient crashes suddenly — oxygen drops, blood pressure falls, and the heart can stop. The job is to catch the clot early, before compensation fails.

1. The body keeps heart rate, breathing rate, and blood pressure steady at first by ramping up the sympathetic nervous system (the fight-or-flight system) — it releases adrenaline (epinephrine) and noradrenaline, which make the heart pump harder and faster and tighten blood vessels to keep pressure up.

2. If a clot blocks blood flow in the lungs (PE), the lungs sense low oxygen and trigger faster, deeper breathing (hyperventilation) to try to pull more oxygen in, and the heart races to push more blood through the fewer open lung vessels.
3. That compensated phase is the dangerous middle — vital signs might look almost normal or only mildly abnormal (heart rate 100–110, oxygen 92–94% on room air, normal blood pressure), so the team can miss how close the patient is to crashing.
4. The crash point to watch for is: massive PE (a clot blocks so much lung circulation that the right side of the heart can't pump blood forward, pressure backs up, and the heart fails), severe low oxygen in the blood (hypoxemia) (oxygen drops below 90% even on supplemental oxygen), or sudden cardiovascular collapse (blood pressure falls, heart stops). In the postpartum period, also watch for massive postpartum bleeding (hemorrhage) (PPH) if anticoagulation is started too soon or dosed too high after delivery.
5. Watch for early warning signs before the crash — worsening shortness of breath, oxygen saturation trending down even by a few points, heart rate climbing, chest pain, anxiety or confusion (from low oxygen reaching the brain), or one leg suddenly more swollen and painful than before (clot growing).
6. A patient who looks stable right now but is getting worse — oxygen dropping from 95% to 93% to 91%, heart rate climbing from 90 to 105 to 115 — is not really stable. They are on a downhill slope, and the window to stop the crash (start anticoagulation, give oxygen, sometimes give clot-busting drugs or remove the clot) is closing fast.

Domino effect

1. Pregnancy hormones and slowed blood flow make the blood stickier, so clotting proteins and platelets clump together inside a deep vein — usually in the left leg (because the left iliac vein is squeezed harder by the uterus and the right iliac artery crossing over it). — Estrogen and progesterone tell the liver to crank out more clotting factors (fibrinogen, factors VII, VIII, X) and make less protein S (a natural clot-stopper). At the same time, the heavy uterus presses on the iliac veins and slows blood flow in the legs by half. Slow, sticky blood gives clotting proteins time to stick together and form a clot — even though there's no cut or injury.
2. The clot grows and jams the vein, blocking blood from draining out of the leg, so fluid and pressure back up into the tissues — the leg swells, feels heavy and tight, and hurts (especially the calf or thigh). — Blood keeps flowing down into the leg through arteries, but the clot plugs the vein so blood can't flow back up to the heart. Pressure builds behind the clot and pushes fluid out of the vein into the surrounding tissue (edema). Inflammatory signals (bradykinin, histamine) leak from the trapped blood and irritate nerves, causing pain. The leg looks puffy, red or purple, and feels warm because blood and fluid are stuck there.

3. Part of the clot breaks off (embolizes) and floats up through the inferior vena cava, through the right side of the heart, and into the pulmonary arteries — the blood vessels that carry oxygen-poor blood into the lungs to pick up oxygen. — The clot is fragile — muscle movement, changes in blood flow, or just the force of blood pushing against it can snap off a piece. Once free, the clot travels with the blood flow: up the leg veins, into the big vein in the belly (inferior vena cava), into the right atrium of the heart, through the right ventricle, and out into the pulmonary arteries. It keeps floating until it reaches a vessel too narrow to pass through, and it gets stuck there — blocking blood flow to part of the lung.
4. The clot jams a pulmonary artery, blocking blood from reaching the air sacs (alveoli) where oxygen is supposed to move into the bloodstream — that part of the lung keeps breathing in air, but no blood flows past to pick up the oxygen (called dead space ventilation), so oxygen levels in the blood drop. — Oxygen can only get into your blood when air and blood meet at the thin walls of the alveoli. If a clot blocks the blood vessel feeding a section of lung, air still fills those alveoli but the blood never arrives — so the oxygen just sits there, useless. The rest of the lungs try to compensate, but if the clot is big enough (blocking 30–50% or more of lung circulation), the working lung tissue can't keep up and oxygen saturation falls (hypoxemia). You feel suddenly short of breath and may gasp for air.
5. The body panics — the brainstem (medulla) senses low oxygen and high carbon dioxide, so it makes you breathe faster and deeper (tachypnea, hyperventilation), and the sympathetic nervous system floods the blood with adrenaline, making the heart race (tachycardia) to try to pump more blood through the fewer open lung vessels and deliver what little oxygen is available. — The medulla in the brainstem constantly monitors oxygen (via chemoreceptors in the carotid arteries and aorta) and carbon dioxide levels. When oxygen drops or CO₂ rises, it sends urgent signals to the diaphragm and chest muscles: breathe faster, breathe deeper. At the same time, the sympathetic nervous system releases adrenaline and noradrenaline, which make the heart beat harder and faster (trying to push more blood per minute) and tighten blood vessels to keep blood pressure up. This is the body's emergency mode — you feel your heart pounding, you're breathing fast, you may feel dizzy or anxious because your brain isn't getting enough oxygen.

6. If the clot is large or keeps growing, the right side of the heart struggles — it has to pump against the blocked, high-pressure pulmonary arteries, so it strains and can fail (right heart strain or acute cor pulmonale), causing chest pain, a drop in blood pressure, and — in the worst cases — cardiac arrest and death. — The right ventricle is a thin-walled pump designed to push blood gently into the low-pressure lungs. When a big clot blocks the pulmonary arteries, pressure shoots up behind the clot — the right ventricle has to push much harder than it was built for. It dilates (stretches) and weakens, and blood backs up into the body (causing neck veins to bulge, liver to swell, legs to puff up). The overstretched heart muscle doesn't get enough oxygen itself (ischemia), causing chest pain. If the right heart fails completely, it can't pump blood forward to the lungs and left heart, so blood pressure crashes, organs shut down, and the heart can stop. This is why massive PE is a leading cause of maternal death.
7. Every sign — puffy painful leg, sudden shortness of breath, chest pain, fast heart, low oxygen, bulging neck veins — is the body's alarm screaming that a clot is blocking blood flow somewhere. The only fix is to find the clot (using ultrasound for DVT, CT scan or V/Q scan for PE) and treat it by thinning the blood (anticoagulation with LMWH) to stop the clot from growing and let the body slowly dissolve it, or — in life-threatening cases — break it up fast with clot-busting drugs (thrombolytics) or pull it out (thrombectomy). — None of the body's emergency responses — faster breathing, racing heart, tighter blood vessels — can fix the root problem: a solid clot physically blocking a blood vessel. All they do is buy time. The only real solution is to stop new clots from forming (anticoagulation) so the body's natural clot-dissolving system (plasmin) can slowly break down the existing clot over days to weeks, or — if the patient is crashing — use powerful clot-busting enzymes (tPA, tissue plasminogen activator) to dissolve the clot in minutes to hours, or thread a catheter up to the clot and suck it out or break it apart. In pregnancy, LMWH (enoxaparin, dalteparin) is the safe choice — it doesn't cross the placenta, it's reversible, and it works fast. Warfarin crosses the placenta and causes birth defects; DOACs lack safety data. You keep the patient on LMWH through delivery and for at least 6 weeks postpartum (12 weeks total minimum) because clot risk stays high until hormones normalize and blood flow returns to normal.

Symptoms · what the patient feels, and why

- Leg swelling on one side (usually the left leg): The growing uterus presses on the left iliac vein (the big vein that drains blood from the left leg), slowing the flow and letting blood pool and clot. The left side is affected more often because of the way the vessels sit under the uterus.
- Leg pain or tenderness, especially deep in the calf or thigh: A clot inside the deep veins stretches the vein wall and triggers inflammation, which the body reads as pain. The clot blocks normal blood drainage, so pressure builds up.

- Warmth and redness over the swollen area: Inflammation from the clot sends more blood to the skin surface to try to heal the injury, making the area feel warm and look red or purple.
- Sudden shortness of breath and chest pain (sharp, worse with a breath in): A piece of the leg clot breaks off, travels through the heart, and gets stuck in the lung arteries (pulmonary a traveling clot lodging in a vessel (embolism), or PE). This blocks oxygen exchange and irritates the lung lining, causing sharp pain and trouble breathing.
- Fast heart rate (over 100 beats per minute at rest): When a clot blocks part of the lung circulation (PE), less oxygen gets into the blood. The heart speeds up to try to deliver enough oxygen to the brain and body despite the shortfall.
- Coughing up blood or pink, frothy spit: The blocked lung artery raises pressure behind it, forcing blood to leak into the tiny air sacs. That blood then comes up when you cough.
- Feeling lightheaded or passing out: A large PE can drop blood pressure suddenly because the right side of the heart cannot pump blood through the blocked lung vessels. Less blood reaches the brain, causing dizziness or fainting.

Focused exam

- One leg is swollen, usually the left: A clot has blocked the deep vein in that leg, so blood cannot drain out. The backed-up fluid makes the leg puff up. Pregnancy raises clot risk because the growing baby presses on the big veins in the belly and slows blood flow, and hormones make blood stickier.
- Pain or tenderness in the calf or thigh, especially when you press on it: The clot irritates the vein wall and stretches it, which causes pain. Pain plus swelling in one leg during pregnancy strongly points to a clot in a deep leg vein (deep vein thrombosis) (a blood clot in a deep vein), the main type of VTE in pregnancy.
- The swollen leg feels warm or looks red: Heat and redness happen because the body sends immune cells to fight the clot, which causes inflammation. This tells you the clot formed recently and is still active.
- Sudden chest pain, fast breathing (over 20 breaths per minute), or fast heart rate (over 100 beats per minute): If a piece of the leg clot breaks off and travels through the bloodstream to the lungs, it blocks a lung artery. This is called pulmonary embolism (a clot lodging in a lung artery) (PE), and it can kill quickly by stopping oxygen from reaching the blood.
- Oxygen level below 95% on the pulse oximeter: Low oxygen means the lungs cannot load enough oxygen into the blood, which happens when a clot blocks part of the lung circulation. In pregnancy with chest pain or shortness of breath, this points to PE and needs immediate treatment.

- One calf or thigh measures at least 2 cm wider than the other side: Measuring both legs with a tape measure shows which leg has the clot. A difference of 2 cm or more is a red flag for a clot in a deep leg vein (deep vein thrombosis) and helps decide whether to do an ultrasound right away.

Diagnostics · every test answers a question

- Compression ultrasound of the leg veins (also called duplex ultrasound) → Is there a blood clot blocking a deep vein in the leg?
- D-dimer blood test → Is the body breaking down fresh blood clots right now?
- Chest CT angiography (CTA) with contrast, or ventilation-blood flow (perfusion) (VQ) scan → Is there a blood clot blocking an artery in the lungs?
- Arterial blood gas (ABG) if PE is suspected → Is the lung getting enough oxygen into the blood, and is carbon dioxide building up?
- Complete blood count (CBC) → Is the platelet count safe for starting blood thinners, and is there anemia from bleeding?
- Anti-factor Xa level 4 hours after the LMWH injection → Is the dose of low-molecular-weight heparin high enough to thin the blood safely in THIS pregnant patient?

Treatment logic

- Start low-molecular-weight heparin (LMWH) immediately: enoxaparin 1 mg/kg subcutaneous twice daily OR dalteparin 200 units/kg subcutaneous once daily (max 18,000 units per day) → LMWH blocks factor Xa, a key protein in the clotting chain, so the blood cannot make new clots and the existing clot stops growing. This gives the body time to slowly dissolve the clot with its own enzymes (plasmin). LMWH does not cross the placenta, so it is safe for the baby.
- Elevate the swollen leg above the level of the heart and apply graduated compression stockings (20–30 mmHg) → Gravity helps blood and fluid drain out of the leg back toward the heart, and the stocking squeezes the leg veins to push blood upward. This reduces swelling and pain quickly and may lower the chance of long-term vein damage (post-thrombotic syndrome).
- Hold LMWH at least 24 hours before planned delivery or epidural anesthesia (12 hours before if using preventive (prophylactic) low dose) → Stopping the blood thinner lets clotting factors recover so the patient does not bleed too much during birth and does not get a spinal or pooled collection of blood (hematoma) (bleeding into the spine) if an epidural needle is placed. The epidural space has delicate veins that can bleed dangerously if blood is too thin.

- Resume LMWH or start warfarin 4–12 hours after vaginal delivery (12–24 hours after cesarean section) and continue anticoagulation for at least 6 weeks postpartum, minimum total 3 months from diagnosis → Postpartum is the highest-risk time for new clots because delivery triggers a huge release of clotting factors. Continuing blood thinners lets the old clot scar over and stick to the vein wall so it cannot break loose and travel to the lungs. Warfarin and LMWH are both safe during breastfeeding (warfarin does not enter breast milk in meaningful amounts).
- Place an inferior vena cava (IVC) filter if anticoagulation is absolutely contraindicated (e.g. active uncontrolled bleeding) or if clots keep breaking off despite full-dose LMWH → The filter sits in the large vein that carries blood from the legs to the heart and catches clot pieces before they reach the lungs, blocking pulmonary embolism (a clot lodging in a lung artery). It acts like a net or strainer.
- Test for inherited thrombophilias (factor V Leiden, prothrombin G20210A mutation, protein C/S deficiency, antithrombin deficiency) at least 6 weeks after stopping anticoagulation, if no obvious trigger for the clot → Finding an inherited clotting disorder tells you the patient has life-long higher clot risk and will need blood thinners in every future pregnancy and possibly after surgeries or long flights. It also guides family screening and counseling.

Medications

Enoxaparin (Lovenox) · Low-molecular-weight heparin (LMWH) — a blood thinner given as a shot under the skin

Blocks factor Xa, a key step in the clotting waterfall, so the blood stays thin enough to flow through the clot or stop it from growing. Does NOT break up a clot that already exists—it just stops new clots from forming and keeps the current one from getting bigger.

1. You inject enoxaparin under the skin of your belly or thigh, usually 1 mg per kilogram of your weight twice a day (for treatment) or a smaller dose once a day (for prevention).
2. The drug travels into your bloodstream and sticks to antithrombin, a natural brake on clotting.
3. Together, enoxaparin and antithrombin shut down factor Xa, which is the spark that ignites thrombin (the enzyme that weaves fibrin threads into a clot).
4. With less thrombin made, the clot stops growing and your body's natural cleanup crew (fibrinolysis) can slowly dissolve it over weeks.
5. Doctors may check a blood test called anti-factor Xa level 4 hours after your shot to make sure the dose is right—especially if you are very heavy, very light, or have kidney trouble.

SAFETY WATCH

Bleeding is the main risk: watch for heavy nosebleeds, blood in urine or stool, unusually heavy periods after delivery, or a bad headache (could mean bleeding in the brain, though rare). · Stop the shots 24 hours before planned delivery (cesarean or induction) so you do not bleed too much; if you are only on a prevention dose, stop 12 hours before. · If you need emergency surgery or an epidural for labor pain relief, the anesthesiologist will check how long it has been since your last shot (usually need 12–24 hours clear). · Rare risk of low platelet count (thrombocytopenia)—your doctor will check a blood count before you start and again after a few days. · Safe for breastfeeding—does not pass into breast milk in meaningful amounts.

Dalteparin (Fragmin) · Low-molecular-weight heparin (LMWH) — a blood thinner given as a shot under the skin

Blocks factor Xa, a key step in the clotting waterfall, so the blood stays thin enough to flow through the clot or stop it from growing. Does NOT break up a clot that already exists—it just stops new clots from forming and keeps the current one from getting bigger.

1. You inject dalteparin under the skin of your belly or thigh, usually 200 units per kilogram of your weight once a day (for treatment) or a smaller dose once a day (for prevention).
2. The drug travels into your bloodstream and sticks to antithrombin, a natural brake on clotting.
3. Together, dalteparin and antithrombin shut down factor Xa, which is the spark that ignites thrombin (the enzyme that weaves fibrin threads into a clot).
4. With less thrombin made, the clot stops growing and your body's natural cleanup crew (fibrinolysis) can slowly dissolve it over weeks.
5. Some doctors prefer dalteparin because it can be dosed once a day instead of twice, which is easier for many pregnant patients.

SAFETY WATCH

Bleeding is the main risk: watch for heavy nosebleeds, blood in urine or stool, unusually heavy periods after delivery, or a bad headache (could mean bleeding in the brain, though rare). · Stop the shots 24 hours before planned delivery (cesarean or induction) so you do not bleed too much; if you are only on a prevention dose, stop 12 hours before. · If you need emergency surgery or an epidural for labor pain relief, the anesthesiologist will check how long it has been since your last shot (usually need 12–24 hours clear). · Rare risk of low platelet count (thrombocytopenia)—your doctor will check a blood count before you start and again after a few days. · Safe for breastfeeding—does not pass into breast milk in meaningful amounts.

Warfarin (Coumadin) · Vitamin K antagonist — a blood thinner taken as a pill

Blocks vitamin K in the liver, which the liver needs to make several clotting factors (II, VII, IX, X). Without enough of these factors, the blood stays thinner and clots form more slowly.

1. You take warfarin by mouth, usually once a day in the evening.
2. The drug travels to your liver and blocks an enzyme (VKORC1) that recycles vitamin K.
3. Without enough active vitamin K, your liver cannot finish making clotting factors II, VII, IX, and X.
4. Over a few days, the levels of these factors drop and your blood becomes thinner.
5. You need regular blood tests (INR, international normalized ratio) to make sure your blood is thin enough to prevent clots but not so thin that you bleed—target INR is usually 2.0–3.0.
6. After delivery, many women switch from LMWH shots to warfarin pills because pills are easier long-term and warfarin is safe while breastfeeding.

SAFETY WATCH

Bleeding is the main risk: watch for easy bruising, nosebleeds, blood in urine or stool, unusually heavy periods, or a bad headache. · Many foods (especially leafy greens like kale, spinach, broccoli) and other medicines (antibiotics, pain pills, even some vitamins) change how warfarin works—your doctor will teach you to keep your diet steady and tell every doctor and pharmacist that you take warfarin. · You need INR blood tests every 1–4 weeks to keep the dose right. · If you might become pregnant again, you **MUST** use reliable birth control while on warfarin and switch back to LMWH shots before you try to conceive. · If you need surgery or a procedure, your doctor will tell you when to stop warfarin (usually 5 days before) and often bridge you with LMWH shots.

Unfractionated heparin (IV or shot) · Unfractionated heparin — a blood thinner given through an IV or as a shot under the skin

Blocks both factor Xa and thrombin (factor IIa), two key steps in the clotting waterfall, so the blood stays thin. Works faster than LMWH and wears off faster, which is useful around delivery when you need to stop and start quickly.

1. You get unfractionated heparin either as a continuous drip through an IV in your arm or as a shot under the skin every 8–12 hours.
2. The drug travels into your bloodstream and sticks to antithrombin, a natural brake on clotting.
3. Together, heparin and antithrombin shut down factor Xa and thrombin, so clots stop growing.

4. Doctors monitor your blood with a test called aPTT (activated partial thromboplastin time) to make sure the dose is right—target is usually 1.5–2.5 times the normal level.
5. Because it wears off in 4–6 hours, unfractionated heparin is often used in the hospital right before delivery so the team can stop it quickly if you bleed or need an epidural.

SAFETY WATCH

Bleeding is the main risk: watch for heavy nosebleeds, blood in urine or stool, or unusual bruising. · Rare risk of low platelet count (heparin-induced a low platelet count (thrombocytopenia), HIT)—your doctor will check a platelet count before you start and every few days while you are on it. · Safe for breastfeeding—does not pass into breast milk. · If you are on the IV form, you are usually in the hospital so the team can watch you closely.

Red flags

- Sudden shortness of breath or chest pain (sign of a pulmonary embolism (a clot lodging in a lung artery), which can be life-threatening)
- Coughing up blood
- Feeling faint, dizzy, or passing out (sign that blood pressure is dropping)
- Fast heart rate at rest (over 100) with trouble breathing
- Severe, sudden leg swelling with very tight, shiny skin (may mean a large clot)

Nursing priorities

1. Check oxygen saturation with pulse oximeter and listen to lung sounds every 2 to 4 hours — Pulmonary embolism (a clot lodging in a lung artery) blocks blood flow through the lungs so oxygen levels drop and the patient cannot breathe well; catching this early saves lives
2. Measure the circumference of both calves and thighs at the same spot each shift and compare the numbers — A difference of 2 centimeters or more between legs confirms DVT and tracking the measurements shows if the clot is getting worse or the treatment is working
3. Give the LMWH shot into the fatty tissue of the abdomen at the exact same times each day and rotate injection sites — Consistent timing keeps anticoagulation (blood thinning) levels steady to prevent new clots; rotating sites prevents skin bruising and hard lumps that block drug absorption

4. Apply graduated compression stockings with 30 to 40 mmHg pressure and keep the affected leg elevated above heart level when resting — Compression and elevation push pooled blood back toward the heart using gravity and external pressure, which reduces swelling and prevents post thrombotic syndrome (permanent leg damage)
5. Watch injection sites and gums for unusual bleeding and test stool for hidden blood daily — LMWH stops clots but also increases bleeding risk; catching bleeding (hemorrhage) (dangerous bleeding) early lets us adjust the dose before the patient loses too much blood
6. Teach the patient to report new calf pain, chest pain, or sudden breathlessness immediately and never massage the affected leg — Massaging can break off pieces of the clot that travel to the lungs; new symptoms mean the clot has extended or embolized (moved to another body part)
7. Check platelet count before starting LMWH and then every 3 days for the first 2 weeks — Heparin can cause HIT (heparin induced a low platelet count (thrombocytopenia)), a condition where platelets drop and form dangerous new clots instead of preventing them
8. Coordinate with the obstetric team to plan the exact time to stop LMWH before delivery and when to restart it after birth — LMWH in the bloodstream during delivery causes uncontrolled bleeding and epidural a pooled collection of blood (hematoma) (blood pooling near the spine that causes paralysis), but stopping too early allows new clots

Sources

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