Vascular Surgeon interview questions

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What to expect

A vascular surgery interview assesses your clinical judgement, technical knowledge, and ability to work under pressure. It often includes a mix of clinical scenarios and behavioural questions.

- **Technical and clinical:** Questions that probe your knowledge of vascular conditions, investigations, and operative decision-making, often with a case vignette or imaging review.
- **Scenario and emergency:** Hypothetical situations such as a ruptured aneurysm or acute limb ischaemia, assessing your prioritisation and judgement under pressure.
- **Behavioural and teamwork:** Past experiences of complication management, leadership, and working in multidisciplinary teams, usually using a STAR framework.
- **Communication and patient care:** How you explain procedures, obtain consent, and involve patients and families in shared decision-making.

The interview is typically a half or full day with several stations. You might start with a clinical case discussion with a panel of consultants, then a separate behavioural interview with the clinical director and a nursing lead. Some centres include a technical skills viva where you review imaging or describe a procedure. You may also meet registrars and tour the unit. Expect to be asked about your operative logbook and experience with endovascular techniques.

1. How do you assess a patient with critical limb ischaemia and what are your priorities for management?

Why they ask

Tests clinical assessment and treatment planning for a limb-threatening condition.

How to structure your answer

A structured clinical reasoning answer: define the condition, outline initial assessment, then discuss investigations and treatment options, referencing evidence and guidelines.

Example answer

“When I see a patient with critical limb ischaemia, the first priority is to determine the urgency and whether there is an immediate threat to limb viability. I start with a focused history and examination, checking for rest pain, tissue loss, and signs of infection. I assess the pulses and use handheld Doppler to measure ankle-brachial indices. If the limb is threatened, I arrange urgent imaging, typically CT angiography, and discuss the case with the on-call vascular team. Management depends on the pattern of disease: I would consider endovascular revascularisation if there is a suitable target vessel, or open bypass if the anatomy is more favourable for surgery. I also ensure the patient is started on best medical therapy, including antiplatelet agents and statins, and involve podiatry and wound care early.”

2. You are called to the emergency department for a patient with a ruptured abdominal aortic aneurysm. How do you proceed?

Why they ask

Tests judgement under pressure and emergency management of a life-threatening vascular condition.

How to structure your answer

A scenario response should show prioritisation: immediate resuscitation, activation of the vascular team, imaging if appropriate, and decision-making about open versus endovascular repair.

Example answer

“When I receive a call about a ruptured abdominal aortic aneurysm, I immediately head to the emergency department while asking the team to activate the massive transfusion protocol and prepare the hybrid theatre. On arrival, I assess the patient's airway, breathing, and circulation, and ensure large-bore IV access. I limit fluid resuscitation to maintain a systolic blood pressure around 90 mmHg to avoid exacerbating bleeding, and I give tranexamic acid. If the patient is stable enough, I arrange a CT angiogram to plan the repair, but if they are too unstable, I go straight to the operating theatre for an endovascular or open repair based on available resources and anatomy. Throughout, I keep the patient's family informed and coordinate with anaesthetics, ICU, and theatre staff.”

3. Tell me about a time you had to manage a serious post-operative complication.

Why they ask

Tests complication management, clinical judgement, and communication with the team.

How to structure your answer

STAR (Situation, Task, Action, Result) to describe a specific event, your actions, and the outcome.

Example answer

“After a routine femoral endarterectomy, a patient developed a haematoma that compromised the circulation to the leg. I was called to the ward and immediately assessed the patient: the leg was pale and pulseless. I took the patient back to theatre, evacuated the haematoma, and found a small arterial bleed that I repaired. The patient recovered well and was discharged two days later. I then reviewed our post-operative monitoring protocol, and we introduced a standardised neurovascular observation chart to pick up changes earlier.”

4. Walk me through your approach to a patient with a new diagnosis of intermittent claudication.

Why they ask

Tests methodical assessment, conservative management, and appropriate use of intervention.

How to structure your answer

A step-by-step walkthrough: history, examination, investigations, risk factor modification, and when to consider intervention.

Example answer

“I begin by taking a detailed history to characterise the claudication: distance, onset, progression, and impact on daily life. I examine the pulses and perform an ankle-brachial index. I then assess cardiovascular risk factors and ensure the patient is on appropriate medical therapy, including a statin, antiplatelet, and blood pressure control. I arrange a duplex ultrasound to map the disease. For most patients, I start with supervised exercise therapy and risk factor modification. If symptoms are lifestyle-limiting despite conservative measures, I discuss revascularisation options, either endovascular or open, tailored to the anatomy and patient preference.”

5. Describe your experience supervising registrars and contributing to multidisciplinary teams.

Why they ask

Tests people leadership, teaching, and collaboration in a hospital setting.

How to structure your answer

A behavioural structure focusing on specific examples of supervision, feedback, and MDT contributions.

Example answer

“In my current role, I supervise two vascular registrars. I run a weekly operative list where I step them through complex cases, and I provide structured feedback after each procedure. I also lead a monthly multidisciplinary meeting with podiatry, infectious diseases, and wound care to discuss complex limb

salvage cases. This collaboration has improved our coordination and reduced delays in care. I make sure registrars present cases at these meetings, which builds their confidence and communication skills."

6. How do you explain a complex vascular procedure to a patient and their family?

Why they ask

Tests patient communication, consent, and shared decision-making.

How to structure your answer

A structure that covers assessing understanding, explaining in plain language, discussing risks and benefits, and shared decision-making.

Example answer

"I start by asking the patient what they already understand about their condition and what matters most to them. I then explain the procedure in plain language, avoiding jargon. I describe the benefits, the risks, and the alternatives, including the option of no intervention. I use diagrams or imaging on screen when helpful. I check their understanding by asking them to repeat back the key points. I also invite questions and make sure they have time to discuss with family before consenting. I document the conversation carefully."