



## OSCE Checklist: ABG Sampling

Introduction	
1	Gather equipment
2	Wash your hands and don PPE if appropriate
3	Introduce yourself to the patient including your name and role
4	Confirm the patient's name and date of birth
5	If the patient is currently receiving oxygen therapy, note the oxygen delivery device and flow rate
6	Briefly explain what the procedure will involve using patient-friendly language
7	Check for any contraindications to ABG sampling
8	Check if the patient has an allergy to local anaesthetic (e.g. lidocaine)
9	Gain consent to proceed with ABG sampling
10	Adequately expose the patient's wrist
11	Position the patient so that they are sitting comfortably, ideally with their wrist supported by a pillow
12	Check if the patient has any pain before proceeding with ABG sampling
Modified Allen's test	
13	Ask the patient to clench their fist
14	Apply pressure over the radial and ulnar artery to occlude both vessels
15	Ask the patient to open their hand, which should now appear blanched
16	Remove the pressure from the ulnar artery whilst maintaining pressure over the radial artery
17	Time how quickly colour returns to the hand
Preparation	
18	Remove all equipment from its packaging so that it is easily accessible during the procedure
19	Attach the needle, with its protective cover intact, to the pre-heparinised ABG syringe
20	Position the patient's hand preferably on a pillow for comfort with the wrist extended by approximately 20-30°
Procedure	
21	Palpate the radial artery over the wrist of the patient's non-dominant hand to identify an ideal puncture site
22	Once you have identified your planned puncture site, clean it with an alcohol wipe for 30 seconds and allow to dry before proceeding
23	Wash your hands again
24	Don a pair of gloves and an apron
25	Administer local anaesthetic and leave for a minimum of 60 seconds before performing arterial sampling

26	Remove the protective cover from the ABG needle and then flush through the heparin from the syringe	
27	Hold the patient's wrist extended by approximately 20-30°	
28	Palpate the radial artery with your non-dominant hand's index finger around 1cm proximal to the planned puncture site	
29	Warn the patient you are going to insert the needle	
30	Holding the ABG syringe like a dart, insert the needle through the skin at the insertion site at an angle of 30-45°	
31	Continue to advance the needle slowly until you feel a sudden reduction in resistance and see a rush of blood back into the ABG syringe	
32	Allow the ABG syringe to self-fill	
33	Once the required amount of blood has been collected remove the needle and apply immediate firm pressure over the puncture site with some gauze or cotton wool	
34	Engage the needle safety device	
35	Remove the ABG needle from the syringe and discard immediately into a sharps bin	
36	Place a cap onto the ABG syringe and carefully expel any air from the sample if present	
37	Label the ABG sample with the patient's details	
38	Either the patient or a colleague should continue to apply firm pressure to the puncture site for 3-5 minutes to reduce the risk of haematoma formation	
<b>To complete the procedure...</b>		
39	Explain to the patient that the procedure is now complete	
40	Thank the patient for their time	
41	Dispose of your PPE and equipment into an appropriate clinical waste bin	
42	Wash your hands	
43	Take the ABG sample to be analysed as soon as possible after being taken	
44	Document the ABG results in the patient's notes	

Read the full guide at  
[geekymedics.com](https://www.geekymedics.com)



Download our  
[clinical skills app](#)