

ABG practice examples:

1. Patient in pain post-op, very anxious

pH	7.49
PaO ₂	12.5kPa
PaCO ₂	3.7kPa
HCO ₃ ⁻	26 mmol/l
BE	-2
SaO ₂	96%

2. Patient waiting to be transferred to ITU, remains intubated and ventilated: RR 12, FiO₂ 60%

pH	7.36
PaO ₂	19.5kPa
PaCO ₂	8.5kPa
HCO ₃ ⁻	36mmol/l
BE	+ 8
SaO ₂	97%

3. Post-operative cholecystectomy, with previous history of recent pneumonia

pH	7.48
PaO ₂	7.6 kPa
PaCO ₂	3.8kPa
HCO ₃ ⁻	22mmol/l
BE	-1
SaO ₂	89%

4. Post-op open laparotomy -

pH	7.31
PaO ₂	11.8kPa
PaCO ₂	7.1kPa
HCO ₃ ⁻	35mmol/l
BE	-5
SaO ₂	96%

5. Anxious patient in pain following inguinal hernia

pH	7.49
PaO ₂	13.0kPa
PaCO ₂	3.5kPa
HCO ₃ ⁻	26mmol/l
BE	+1
SaO ₂	95%

6. Post I&D groin abscess:

Observations BP78/46, HR125, SpO2 91%RA, RR 20

pH	7.32
PaO ₂	9.5kPa
PaCO ₂	3.7kPa
HCO ₃ ⁻	17mmol/l
BE	-8
SaO ₂	94%

7. Post-op liver resection with previous history of renal impairment

pH	7.48
PaO ₂	12.8kPa
PaCO ₂	5.1kPa
HCO ₃ ⁻	33mmol/l
BE	+5
SaO ₂	97%

8. Post-op gynae surgery, pain 8/10

pH	7.32
PaO ₂	9.8kPa
PaCO ₂	7.2kPa
HCO ₃ ⁻	31mmol/l
BE	+4
SaO ₂	95%

9. Post-op fractures neck of femur repair following fall at home, history of type 1 diabetes

pH	7.33
PaO ₂	11.8kPa
PaCO ₂	3.6kPa
HCO ₃ ⁻	19mol/l
BE	-5
SaO ₂	95%

10. 57 year old man post TURP. Observations BP 101/57, HR 115, Claret coloured urine noted on irrigation

pH	7.27
PaO ₂	12.2kPa
PaCO ₂	8.4kPa
HCO ₃ ⁻	19mmol/l
BE	-7
SaO ₂	95%