

42 year old obese (BMI 46), smoker, for C1-2 fusion for C-spine instability due to an unusual degenerative ligamentous condition. Past history of sickle cell trait and previously anaemic. Patient had travelled from northern NSW, seen shortly before surgery. Had previously been encouraged to stop smoking but was continuing.

Saturation in clinic documented as 95%, although the nurse noted that this was after taking deep breaths. Fine inspiratory creps noted on exam. Spirometry 'OK', but tracing/performance was suboptimal and not adequate to make conclusions. Patient was passed for surgery.

On Day of Surgery was prepared in Anaesthetic bay including arterial line insertion. Then noted that oxygen saturation was persistently "misreading" as 75-80% (despite patient in no distress). It was then noted that she was indeed centrally cyanosed, and Sats were confirmed multiple times with arterial blood gases. No sedation had been given. In retrospect there were subtle clues to a significant chronic respiratory issue on bloods with Hb 168 (despite sickle trait) and a raised bicarbonate. (HCO_3 41). Ability to raise SaO_2 with voluntary deep ventilation is consistent with Obesity Hypoventilation Syndrome.

Outcome:- Not for surgery. Patient is currently an in-patient being investigated by respiratory, likely very significant sleep/obesity related disorder.