

# Sensium® - Detects Opioid Induced Respiratory Depression

CASE  
STUDY

## About the Patient:

A 65 year old male patient was transferred from the critical care unit to a side room in the general surgical ward. The patient was 2 days post laparotomy for subtotal colectomy and on a 4 hourly observation regime.

## Ward rounds and NEWS:

Day 3 03:58 drugs round, morphine  
Day 3 05:32 Low O2 saturation

## Sensium® Notifications:

Day 3 05:21 Alert Low RR 7

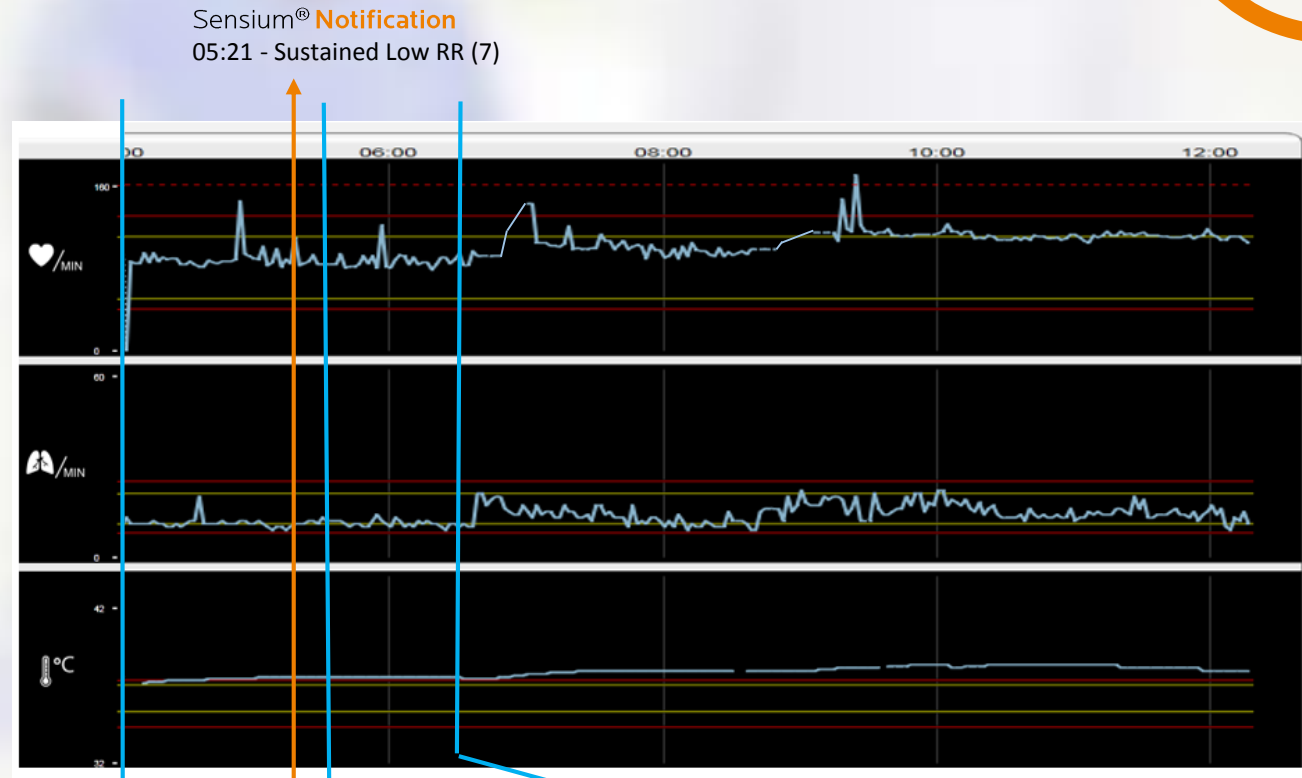
## Clinical Response:

The patient was administered prescribed morphine for the management of post operative pain. The nurse continued with her drugs round and 90 minutes later received a notification for sustained low RR.

Upon review it was confirmed that the patients oxygen saturation was low and the patient was noted as being drowsy. Opioid induced respiratory depression was suspected and the patient was escalated to the surgical team. Naloxone was prescribed to counter the effects of morphine.

## Outcome:

The patient was in a single side room and incapable of calling the nursing staff. The Sensium notification brought the nurse to the patient 2.5 hours earlier than the next set of scheduled observations. If left untreated for longer this episode of opioid induced respiratory depression could have had profound and severe consequences for the patient.



**Drug Round**  
Morphine administered  
for post operative pain  
management

**Observations**  
05:32 Patient drowsy, Oxygen  
saturation confirmed low,  
escalated to surgical team

**Note:** 06:32 Naloxone  
administered to counter act  
the effects of the prescribed  
morphine.

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# Sensium® - Detects Opioid Induced Respiratory Complication

CASE  
STUDY

## About the Patient:

A 72 year old patient was on the ward 12 hours post partial knee replacement surgery. The patient was on a 4 hourly observation regime. The patient in the past had suffered mild obstructive sleep apnoea (OSA).

## Ward rounds and NEWS:

Day 1 22:40 Patient Stable

## Sensium® Notifications:

Day 1 22:32 Alert High RR 21

Day 1 22:55 Alert High RR 22

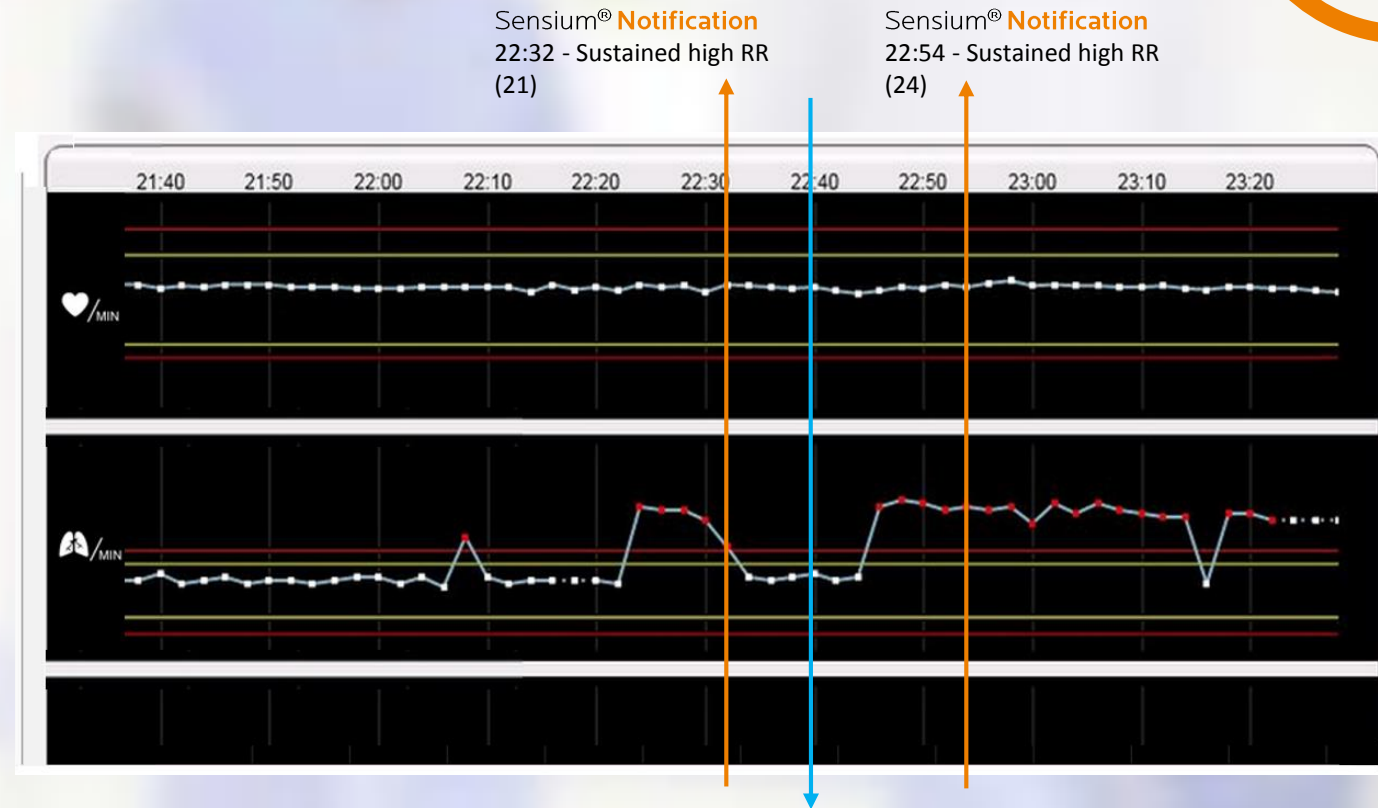
## Clinical Response:

The nurse was notified of a sustained high RR and went to assess the patient. On review the patient was noted as being asleep and stable. From the trend screen it is evident that the patient's episode of hyperventilation had abated by the time the nurse reached the patient.

The nurse then received a second notification for high RR. The patient was now noted as in respiratory distress and escalated to the surgical team. OSA exacerbated by effects of anaesthetics and any postoperative analgesia was suspected.

## Outcome:

This episode of respiratory distress may have gone unnoticed for another 2.5 hours until the next set of scheduled observation. As the effects of anaesthetics wore off the patient's condition stabilised.



Ward Rounds and NEWS  
Patient noted as being asleep  
and stable

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