POST-OPERATIVE PAIN MANAGEMENT/ COMPLICATION

GROUP E

CASE SENARIO

A55 YEARS OLD PATIENT HAD EXPLORATIVE LAPAROTOMY WITH MIDLINE INCISION UNDER GENERAL ANESTHESIA. INTRAOPERATIVE COURSE WAS UNEVENTFUL AND SURGERY LASTED FOR 3 HOURS. THE FINAL DIAGNOSIS WAS PERFORATED DUODENAL ULCER PATIENT EXTUBATED AND SEND TO RECOVERY ROOM . BLOOD PRESSURE WAS 176/89 HR: 98/MIN SO 5 MG MORPHINE INTRAVENOUS WAS GIVEN. PATIENT BECAME TACHYPNEIC AND TACHYCARDIA HR 128/ MIN, SPO2 DROPPED DOWN TO 65 % AND HAD EXPIRATORY WHEEZING ON CHEST EXAMINATION.

Discuss the Methods for post-operative pain management for this case

1.Analgesia:

- **The most painful operations are thoracic and abdominal, so we should give the patients analgesia to control the pain. Multimodal analgesia is used, which works on the principle that drugs acting by different mechanisms can result in additive or synergistic analgesia with lowered adverse effects. The mainstay of analgesia is paracetamol, non-steroidal anti-inflammatory drugs (NSAIDs), local anesthetics and opioids.**

- **Pain management using analgesia should be based on the intensity of pain reported by the pt. rather than its specific etiology**

- **If the pain is persistent or increasing, we move to the next step.**

- **Mild: Acetaminophen • NSAIDs • ± Adjuvants**

- **Moderate: Codeine • Hydrocodone • Oxycodone • Tramadol • ± Adjuvants**

- **Severe: Morphine • Hydromorphone • Fentanyl • Methadone • Pethidine • ± Adjuvants**

2.Fluids:

☐Patients will require i.v. fluids until they are able to drink normally.

3.Oxygen therapy:

All patients need to apply oxygen and monitor

☐The monitoring for: vital signs, respiration(rhythm, pulse oximetry)

☐Circulation(pulse, blood pressure, ECG) level of consciousness, score of pain

4.Others:

Patients may need prescribing:

☐-anticoagulants: the timing of heparin administration to prevent pulmonary

☐-thromboembolism needs to be balanced against the risks of

-☐postoperative bleeding, especially if an epidural is *in situ*;

-☐antibiotics.

☐-insulin.

What may the possible causes of this condition?

- ☐1- Allergy to morphine.
- ☐2- Airway Obstruction.
- ☐3- Postoperative nausea and vomiting.
- ☐4-Fluid Overload.
- ☐5-Exessive use of Vasopressors.
- ☐6- Residual anesthesia.

How will you manage this case

☐- The patient may have an obstruction of the airway because he has:

Tachypnea, SPO2 is dropped, expiratory wheezing, tachycardia

1-Airways obstruction:

- **The main causes of early postoperative hypoxaemia are a degree of *airway obstruction*, central respiratory depression usually caused by opiates, and respiratory muscle weakness resulting from inadequate reversal of neuromuscular blocking drugs.**
- **Signs of airway obstruction in our case includes hypertension, tachycardia, expiratory wheezing on chest examination.**
- *Management:*

The treatment of airway obstruction is to identify the cause, and clear the airway, often with suction, to ensure patency. Extension of the neck, jaw thrust, and insertion of an oropharyngeal airway are often required.

If the patient is conscious, oropharyngeal airway is contraindicated, go with the nasopharyngeal.

Others: Tracheal intubation, Cricothyroidotomy, and Tracheotomy

☐2-Hypoventilation:

- **Might happen due to post-operative intravenous analgesia (Morphine)**
- **Residual anesthesia (Narcosis, Muscle relaxant, inhalation agents)**

○Treatment of Hypoventilation:

-Close observation

-Assess the problem

-Treatment of the cause

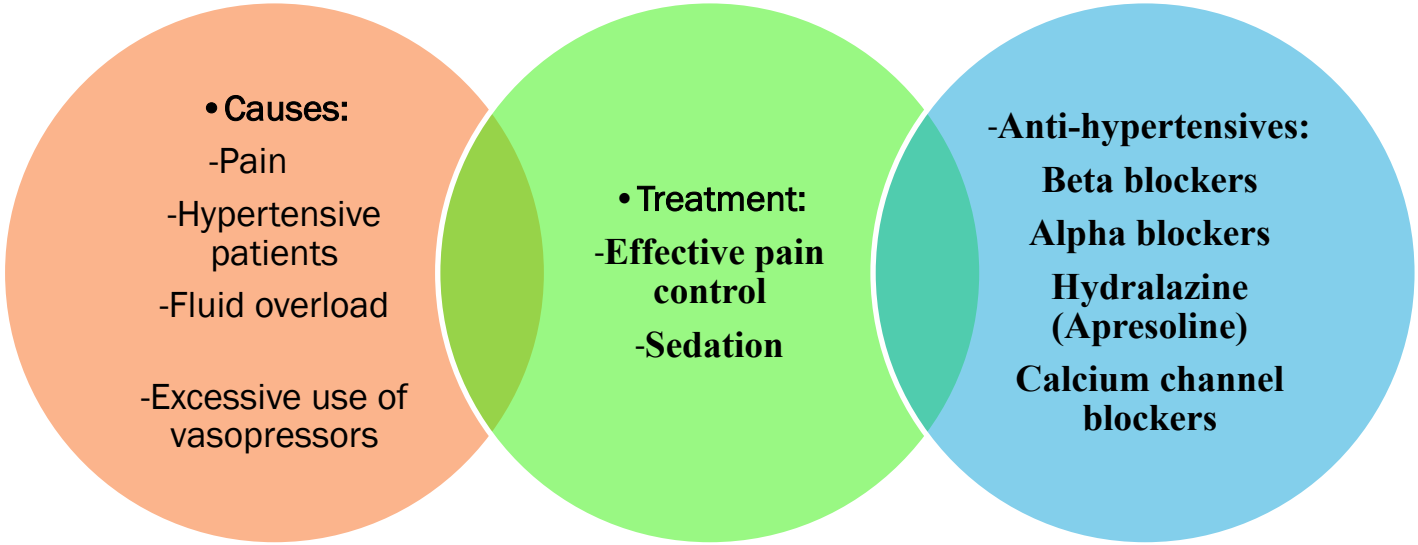
Reverse (or Antidote):

□Muscle relaxant > Neostigmine

□Opioids > Naloxone

□Midazolam >Anexate

☐3-Hypertension:



THANK YOU