### Acute pulmonary oedema/heart failure case

### Learning objectives

|  |  |
| --- | --- |
| CRM | Team management by event manager, collaboration by members |
| Skills | * - Urgency Recognition * - CPAP setting * - Setting diuretic therapy |

### Introduction

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Assunta Delle Acque | Age | 74 | weight | 55 |
| during the ward visit in internal medicine department | | | | | |
| Systemic sclerosis (anti-Ro-52, anti scl70, anti CENP A and anti CENP B positive) with multi-organ involvement: pulmonary (mild pre-capillary pulmonary hypertension and interstitial disease leading to marked restrictive ventilatory deficit and very severe DLCO reduction), gastroesophageal (watermelon stomach), cutaneous (sclerodactyly and telangiectasias), renal (CKD stage III). In addition: hypothyroidism, chronic anaemia, asymptomatic biliary stones, colic polyposis, Dupuytren's disease surgery outcomes, chronic venous insufficiency of the lower limbs.  TP: eutirox, deursil, nintedanib | | | | | |

### Setting the scene

|  |  |
| --- | --- |
| room | internal medicine department |
| Necessary equipment | Out-of-room emergency trolley with defibrillator  -CPAP  - O2 cylinder with non-invasive ventilation equipment  - aerosol  Medication needed:  - Lasix  - morphine  - aerosol therapy  - cortisone |
| Make Up / mannequin’s Moulage | -- |
| Additional staff | -- |
| Consultants' mobile phone number | Control room number |

### 

### Initial simulator setup

|  |  |  |
| --- | --- | --- |
|  | Posizione | supine |
|  | Consciousness state | AVPU: A, GCS 15 |
|  | Airways | Pervie |
| Breathing | |  |
|  | FR | 39 atti/min |
|  | Breathing tipe | Respiratory Distress |
|  | respiratory noises | MV Abolished at the bases and crackling |
|  | % Sp O2 | 75% con CYANOSIS |
| Cardiovascular | |  |
|  | HR | 120 bpm |
|  | Rhythm type | Sinus Tachycardia BBDx |
|  | PA | 180/100 mmHg |
| Voice | Worsening dyspnoea since last night after I went to the toilet I had a stomach ache for a couple of hours, then it went away but since then I've been struggling more and more, I couldn't sleep and I sat up, I didn't bother you because it happens now and then but it usually passes | |
| eco | Good Voice | |

Running the simulation

Recognising urgency/

monitoring

Alerting anaesthetists

administration of furosemide as a bolus or continuous infusion

Bladder catheter

CPAP

Administration of O2

Instructions to consultants

- Pneumologist: presentation is not typical, I would look for other causes, have you done EGA and ECG?! Is the lung wet?!

- Anaesthetists: call me back and let me know how it goes

Se aerosol con B2

Significant increase of FC

cardiogenic shock/arrest

If performed too quickly (5 min) agitation so as to think of morphine use

If not made worse by the dynamics



10 min

MS or reservoir placement,, 🡪 slight improvement in saturation but not clinical

Initial improvement in symptoms and PVs

Respiratory arrest

Worsening dyspnoea and cyanosis

NO

SI