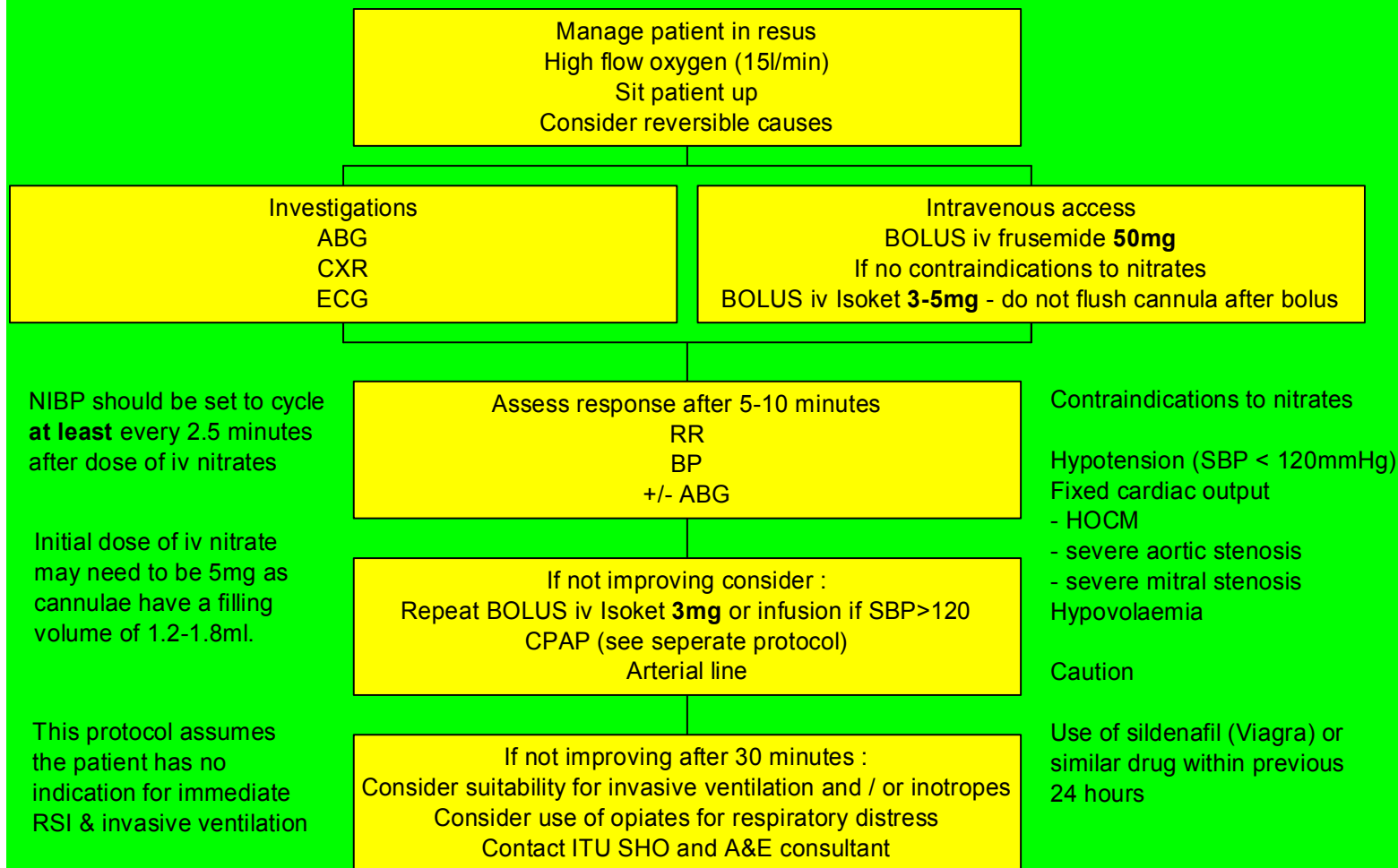


## RAH ED Management of Acute Pulmonary Oedema



NIBP should be set to cycle **at least** every 2.5 minutes after dose of iv nitrates

Initial dose of iv nitrate may need to be 5mg as cannulae have a filling volume of 1.2-1.8ml.

This protocol assumes the patient has no indication for immediate RSI & invasive ventilation

### References

Cameron P, Krum H. Emerg Med Aust 2005;17:99-101 (Editorial - heart failure for the ED)  
Graham CA. Emerg Med Aust 2004;16:47-54 (Review - APO)

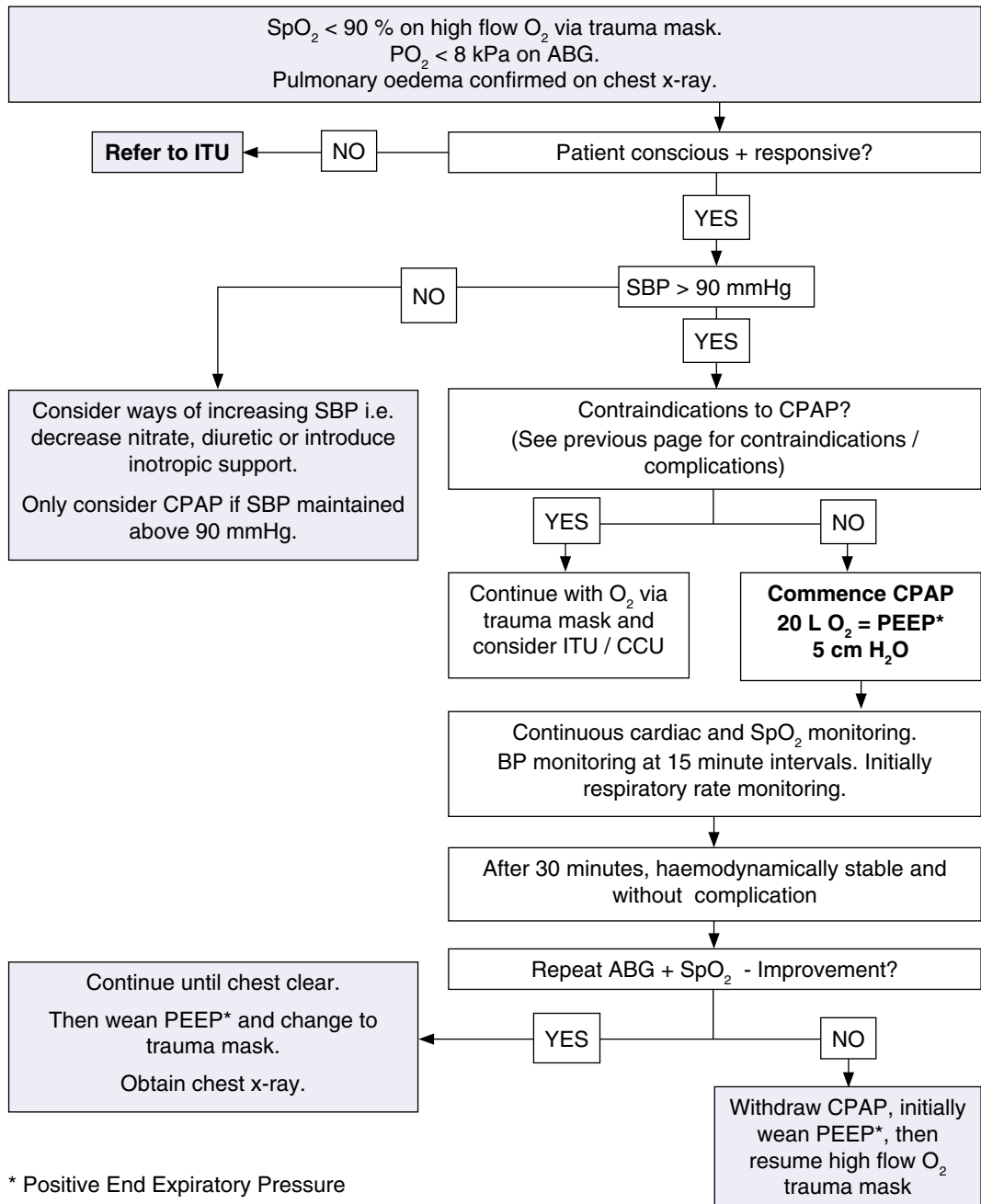
### Contraindications to nitrates

Hypotension (SBP < 120mmHg)  
Fixed cardiac output  
- HOCM  
- severe aortic stenosis  
- severe mitral stenosis  
Hypovolaemia

### Caution

Use of sildenafil (Viagra) or similar drug within previous 24 hours

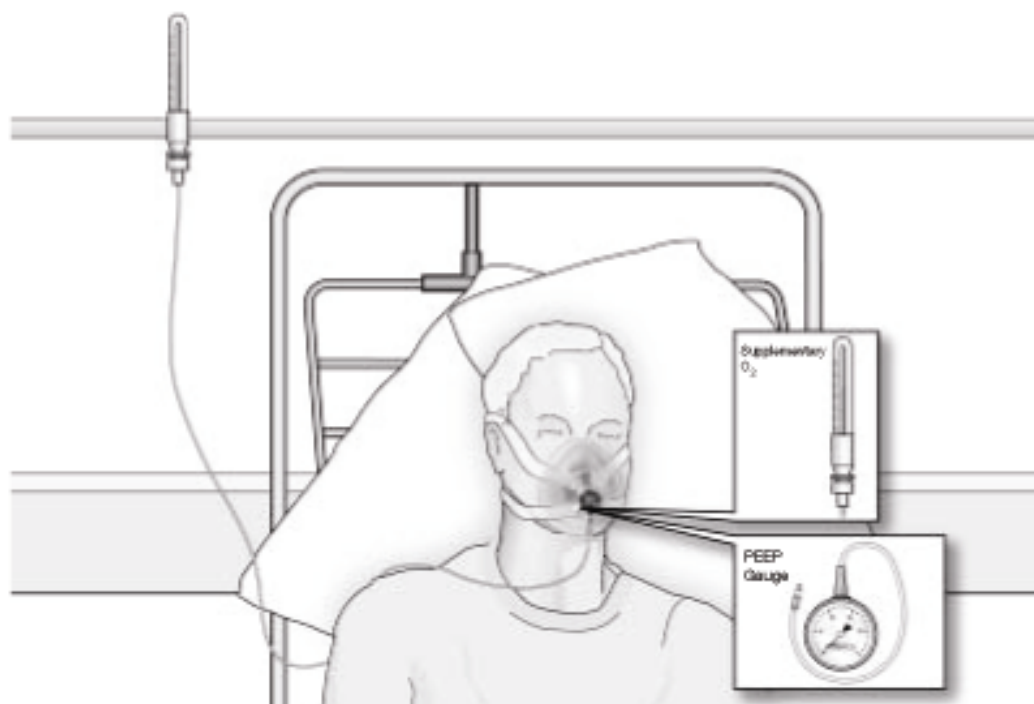
# CPAP algorithm



# Boussignac Vygon CPAP Instructions For Use

## CPAP using 100% O<sub>2</sub>

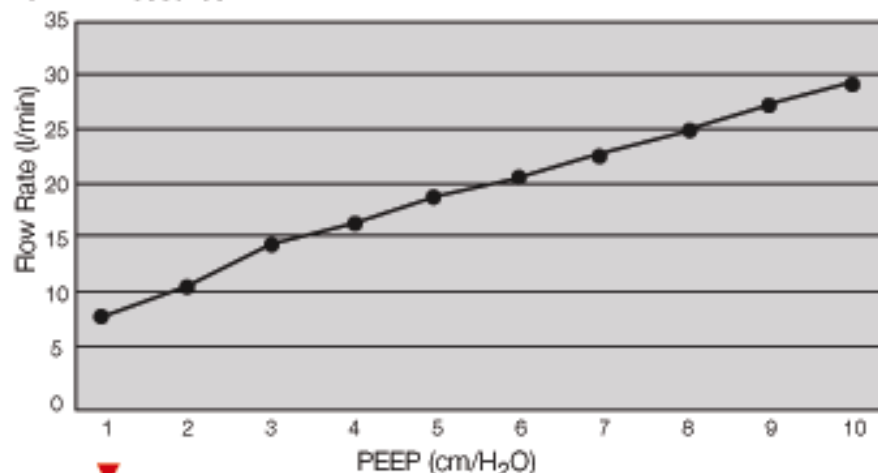
1. Select the appropriate size of mask kit.
2. Connect main line tubing to 30 L/min **Oxygen** flowmeter.
3. Attach pressure gauge tubing to secondary port.
4. With mask fitted to the patient adjust the **Oxygen** flow rate to obtain the desired PEEP level.
5. Disconnect pressure gauge tubing and re-cap port.



## CPAP using FiO<sub>2</sub> of < 100%

1. Select the appropriate size of mask kit.
2. Connect main line tubing to 30 L/min **Air** flowmeter.
3. Attach pressure gauge tubing to secondary port.
4. With mask fitted to the patient adjust the **Air** flow rate to obtain the desired PEEP level.
5. Disconnect pressure gauge tubing and attach the supplementary **Oxygen** tubing, then attach to the 30 L/min **Oxygen** flowmeter.
6. Consult the chart and set **Oxygen** flow to obtain the required FiO<sub>2</sub>.

## CPAP Pressures



## Approximation of FiO<sub>2</sub> where PEEP is established by Air & Supplementary O<sub>2</sub> is provided

PEEP cm/H <sub>2</sub> O	Desired FiO <sub>2</sub> Level (%)											
	25	30	35	40	45	50	55	60	65	70	75	80
1	<1	<1	<1	1	1.5	2	2.5	3	3.5	4	4.5	5
2	<1	<1	1	2	3	3.5	4	4.3	4.7	5	5.5	6
3	<1	<1	1	2	3	4	5	5.5	6	6.5	7	7.5
4	<1	<1	1	2	3	4	5	6	7	8	9	10
5	<1	<1	1	3	5	6	7	8	9	10	11	12
6	<1	1	2	4	6	7	8	9	10	11	12	13
7	<1	1	2	5	6	7	9	10	11	12	13	15
8	1	2	3	5	7	9	10	12	14	16	18	17
9	1	2	4	6	8	10	12	13	15	17	18	19
10	1	2	4	5	7	10	13	14	15	18	19	20

Example: With PEEP at 5cm/H<sub>2</sub>O and a desired FiO<sub>2</sub> of 40% additional O<sub>2</sub> required is 3 l/min  
Measured using an Ohmeda (5120) Oxygen Monitor and an Intersurgical (1850) HME to mix the gases.

