

The patient is usually admitted to hospital where nursing and physiotherapy staff should be familiar with the treatment. The patient is shown the ventilator and nasal mask and is allowed to hold the mask over the nose himself when the ventilator is switched on. The initial inflation pressures are set low so as to minimise the initial discomfort. When comfortable with the mask the headstraps are secured and the patient is encouraged to adopt the most comfortable position for sleep. This is frequently sitting up or propped up lying on the side – positions which have been adopted over many years of respiratory difficulty during sleep. During the early part of establishing NIPPV it is usually best to use the ventilator in the assist mode (the patient triggers all breaths) until familiar when a background ventilator rate may be set to prevent central apnoeas. The patient is encouraged to spend time during the day acclimatising to the technique, during this time the inflation pressures can be gradually increased. Overnight oximetry is performed to ensure that inflation pressures are adequate to control nocturnal hypoxaemia. In practice, approximately 15 cm H<sub>2</sub>O is sufficient in patients with respiratory muscle weakness, whereas in chest wall deformity up to 30 cm H<sub>2</sub>O may be required. In patients with established cor pulmonale, supplementary oxygen may be required. This can be administered at a rate of 1–2 l/min into the nasal mask. As nocturnal hypoxaemia is controlled the pulmonary hypertension may regress and supplementary oxygen can often be discontinued after one or two years.

Symptoms such as nasal dryness can be overcome by placing a humidifier in the circuit. Rhinorrhoea or nasal blockage are best treated by intranasal ipratropium or topical corticosteroids.

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- 4 Ellis ER, Bye PTP, Bruderer JW, Sullivan CE. Treatment of respiratory failure during sleep in patients with neuromuscular disease - positive pressure ventilation through a nose mask. *Am Rev Respir Dis* 1987; 135: 148–52.
- 5 Heckmatt JZ, Loh L, Dubowitz V. Night time nasal ventilation in neuromuscular disease. *Lancet* 1990; 335: 579–82.
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### The EuroTransMed Foundation Young Investigator Awards

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Submissions should consist of new and original unpublished material, describing the work undertaken and the results obtained. Abstracts, not exceeding 200 words on A4 paper, should present information in the format of:

- Background    ● Materials/methods    ● Results    ● Conclusion

The abstracts will be reviewed by the Editorial Board of EuroTransMed, augmented by outside specialists where necessary, and successful candidates may be approached for further details. The winning authors will receive a cash award of ECU 1000 and, where appropriate, may be invited to present their results live in a EuroTransMed programme.

Abstracts must contain the names and addresses of all participants in the research, with the entrant's name underlined. Each abstract must contain a signed submission indicating that the material is new and has not been previously published (as of closing date), and must indicate the agreement of any co-authors. Abstracts failing to comply with these instructions will not be considered. All submissions will be acknowledged.

Candidates for the Young Investigator Award should submit two copies of their abstract to:

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