

TREATING OBESITY HYPOVENTILATION

The link between obesity and advanced respiratory failure is, by and large, under-diagnosed. Macquarie Respiratory and Sleep and Macquarie University Hospital offer patients fast and effective diagnosis and management of this condition.

Obesity brings with it numerous complications. With regard to sleep and respiratory disorders, GPs most commonly see sleep apnea syndromes. However, obese patients can also develop the less common obesity hypo-ventilation syndrome (OHS), a condition that remains under-diagnosed.

Dr Makarie Rofail, Head of the Macquarie Sleep Unit explained how if left untreated, OHS can progress to acute, life-threatening cardio-pulmonary compromise. "In addition, untreated OHS is associated with a high mortality rate, reduced quality of life and numerous morbidities – including pulmonary hypertension, right heart failure, angina and insulin resistance," Dr Rofail explains.

Diagnostic criteria include:

- A body mass index > 30kg/m² with arterial carbon

dioxide tension of PaCO₂ > 45 mmHg, not attributed to other conditions such as pulmonary disease, skeletal restriction, neuromuscular weakness, hypothyroidism or pleural pathology.

- Co-existing OSA such as excessive daytime sleepiness, loud snoring, choking during sleep, restorative snoring, fatigue, hypersomnolence, impaired concentration and memory, a small oropharynx and a thick neck.
- Other manifestations, including pulmonary hypertension with right-sided heart failure and polycythemia.

"Current therapeutic goals for patients with OHS include normalisation of PaCO₂ during wakefulness and sleep, prevention of oxyhemoglobin desaturation during sleep and wakefulness, normalisation of erythrocytosis,

reduction in pulmonary hypertension, and cor pulmonale, and relief of hypersomnia and altered mentation," Dr Rofail explains.

The Macquarie Sleep Unit is one of only two or three private sector hospitals in the Sydney area offering non-invasive ventilation studies for treating advanced respiratory failure with nocturnal non-invasive positive airway pressure therapy. Highly trained staff with skills in bi-level titration are able to see patients quickly, using state-of-the-art advanced equipment for the accurate diagnosis and treatment of type 2 respiratory failure.

In addition to the sleep laboratory, Macquarie Respiratory and Sleep offers consultative services and a Respiratory Function Laboratory.

For more information, go to www.mqrs.com.au

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