

S'han de tractar les apnees associades a trastorns cardiovasculars i cerebrovasculars?

Josep Maria Montserrat  
Unitat del Son  
Servei de Pneumologia  
Hospital Clínic

## SAHS

1. Asociación
2. Causalidad
3. Respuesta a la CPAP

Elemento "confusor"

La obesidad

## Problem 1

### Famous papers

V K Somers, M E Dyken, M P Clary, and F M Abboud.  
Sympathetic neural mechanisms in obstructive sleep apnea.  
*J Clin Invest.* 1995; 96(4): 1897–1904

**Blood pressure, heart rate, sympathetic nerve activity, and polysomnography were recorded during wakefulness and sleep in 10 patients with obstructive sleep apnea. Measurements were also obtained after treatment with continuous positive airway pressure (CPAP) in four patients. Awake**

**We conclude that patients with obstructive sleep apnea have high sympathetic activity when awake, with further increases in blood pressure and sympathetic activity during sleep. These increases are attenuated by treatment with CPAP. (*J. Clin. Invest.* 1995. 96:1897–1904.) Key words:**

## Refractory Hypertension

Logan AG. ERJ 2003. *CPAP reduce HTA refractaria*. Agudos.

**No grupo control. n:11.**

Goodfriend TL, Calhoun DA. Resistant hypertension, obesity, sleep apnea, and aldosterone: theory and therapy. *Hypertension*. 2004 Mar;43(3):518-24.

Hypertension resistant to 2 antihypertensive drugs is more common among obese patients than among lean patients. **The case we describe**

Successful treatment of these resistant hypertensives often can be achieved by devices that provide positive pressure to the upper airway to correct obstructive sleep apnea

Each speaker select the papers  
depending his/her opinion

## Problem 2

Multicentricos a favor y en contra

**A FAVOR**

**Ambulatory blood pressure after therapeutic and subtherapeutic nasal continuous positive airway pressure for obstructive sleep apnoea: a randomised parallel trial**

*Justin C T Pepperell, Sharon Ramdassingh-Dow, Nicky Crosthwaite, Rebecca Mullins, Crispin Jenkinson, John R Stradling, Robert J O Davies*

118 sujetos. CPAP optima vs suboptima. 1 mes  
**NO selección por TA alta.** Lancet 2002; 359: 204-10  
Reduction: mean arterial pressure: 2.5 mmHg

**Small decrease**

**Randomized Placebo-controlled Trial of Continuous Positive Airway Pressure on Blood Pressure in the Sleep Apnea-Hypopnea Syndrome**

AJRCCM 2001; 163:344

JACQUELINE F. FACCENDA, THOMAS W. MACKAY, NICHOLAS A. BOON, and NEIL J. DOUGLAS  
Respiratory Medicine Unit and Cardiovascular Unit, University of Edinburgh, Royal Infirmary, Edinburgh, Scotland, United Kingdom

**No HTA**  
**N: 71, 36, 35**  
**cruzado**

**Effect of Nasal Continuous Positive Airway Pressure Treatment on Blood Pressure in Patients With Obstructive Sleep Apnea**

Heinrich F. Becker, MD; Andreas Jerrentrup, MD; Thomas Ploch, Dipl Psych; Ludger Grote, MD; Thomas Penzel, PhD; Colin E. Sullivan, MD; J. Hermann Peter, MD

Circulation. 2003;107:68-73

66% Hypertensive. Effective CPAP (IAH decrease 95%) reduce BP after 9 weeks in front placebo (3 cm H<sub>2</sub>O) (IAH is reduced 50%).

OSA leads to a 10 mmHg reduction in BP.

Partial reduction of the AHI did not result in a decrease of BP.

Drops: technical, medication,

## Problem 3

Multicentricos a favor y en contra

Hypertension. 2000 Jan;35(1 Pt 1):144-7.

**Effect of continuous positive airway pressure on blood pressure : a placebo trial.**

**Dimsdale JE, Lored JS, Profant J.**

Effect CPAP treatment on BP in patients with OSA.

39 patients vs 30 controls (3 months).

Daytime mean arterial blood pressure decreased significantly but equally in both the active treatment group and the placebo treatment group.

Bloch MJ, Basile J. Short-term treatment of sleep apnea with nocturnal continuous positive airway pressure does not improve blood pressure in 2006 Sep;8(9):673-5.

Campos-Rodriguez F et al. Effect of continuous positive airway pressure on ambulatory BP in patients with sleep apnea and hypertension: a placebo-controlled trial. Chest. 2006 Jun;129(6):1459-67.

EDITORIALS: Ferdinando Iellamo and Nicola Montano

Continuous Positive Airway Pressure Treatment: Good for Obstructive Sleep Apnea Syndrome, Maybe Not for Hypertension?

Chest, Jun 2006; 129: 1403 - 1405.

## Problem 4

Barbe F, et al. Treatment with continuous positive airway pressure is not effective in patients with sleep apnea but no daytime sleepiness. a randomized, controlled trial. *Ann Intern Med.* 2001 Jun 5;134(11):1015-23.

Robinson GV et al. Continuous positive airway pressure does not reduce blood pressure in nonsleepy hypertensive OSA patients. *Eur Respir J.* 2006 Jun;27(6):1229-35. Epub 2006 Feb 2.

#### EDITORIAL COMMENT

### **Treating Sleep Apnea in Heart Failure Patients**

Promises But Still No Prizes\*

Virend K. Somers, MD, PhD, FACC,  
Apoor S. Gami, MD, Lyle J. Olson, MD, FACC  
*Rochester, Minnesota*

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However, although a non-pharmacologic approach, such as CPAP, for reducing BP, heart rate, and sympathetic activity, would also be an exciting potential strategy for reducing CHF morbidity and mortality, several considerations should temper our enthusiasm until more data are available.

## Problem 5

### La preguntas:

1. Un paciente con un IAH de 23 con hipertensión **con síntomas** debe ser tratado con CPAP si han fracasado las otras medidas terapéuticas (peso, posición etc): **SI**
2. Un paciente con un IAH de 23 con hipertensión **sin síntomas** debe ser tratado con CPAP si han fracasado las otras medidas terapéuticas (peso, posición etc): **NO**
3. Un paciente con 31 apneas por hora sin síntomas y sin hipertensión debe de ser tratado con CPAP: **NO**

**Precaución en pacientes con IAH muy elevados, asintomaticos con patología cardiovascular grave :**

1. Una cosa es ser: factor de riesgo
2. Otra es si la CPAP reduce la TA en los SAHS.
3. Vamos a tratar al .5-1% de la población con CPAP

GENES, mediadores que determina el riesgo y/o susceptibilidad : APOEε4, Apolipoproteína;



**Gracias**