

Title: Why do our Obstructive Sleep Apnoea Hypopnoea Syndrome (OSAHS) Patients abandon Continuous Positive Airway Pressure (CPAP) Treatment?

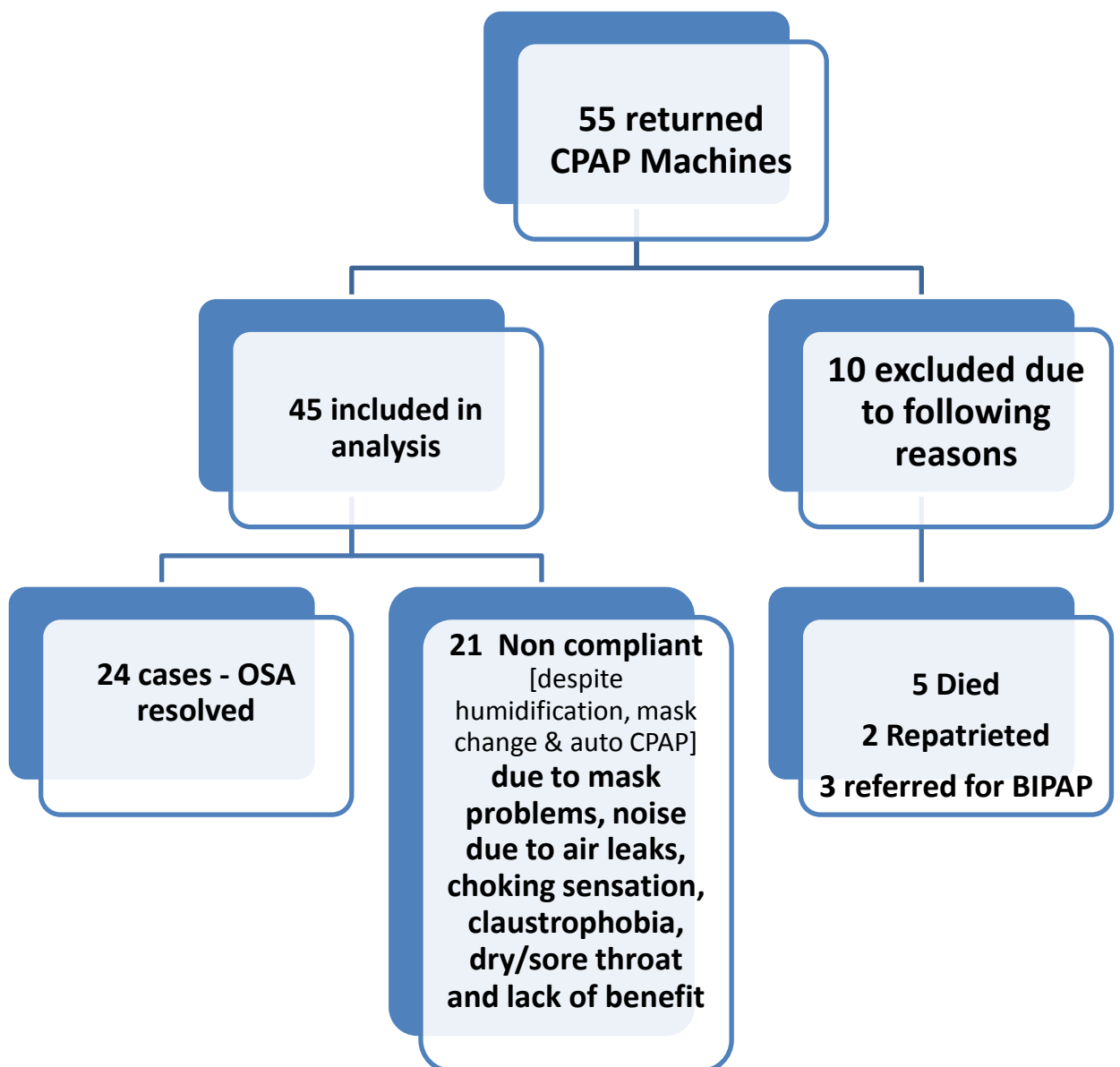
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Introduction: CPAP is an effective treatment for most patients with OSAHS, improving sleepiness, cognitive function and mood. However, long term use of CPAP is suboptimal with only 68% of patients continuing treatment at 5 years in a large population study (1).

Aims & Objectives: To explore the reasons for discontinuation of CPAP and to improve our local sleep service.

Methods: Case records of 55 patients who returned CPAP over a 12 month period were reviewed retrospectively. A total of 167 new CPAP issues were made in our department in the same 12 months suggesting a long term adherence rate of 67%. Patient's age (28 to 80 years – mean: 55.4years), driving status, notification of diagnosis to Driver & Vehicle Licensing Agency (DVLA), neck size, height, weight, body mass index (25.5 to 67.8 – mean: 39.3 kg/m²), date of issue/return of CPAP, Epworth Sleepiness Score (ESS) at CPAP machine issue/return, number of hours/night CPAP used, number of DNAs to sleep lab/clinic & standard DNA (didn't attend) letters sent and interventions tried to improve compliance were recorded.

Results:



In 24 cases, where OSAHS resolved, 15 patients lost weight including one had bariatric surgery, 5 patients made life style changes and improved sleep hygiene, 1 treated for hypothyroidism, 2 had tonsillectomy & 1 uvuloplasty.

Serial number	Weight(kg) at CPAP Issue	Weight(kg) at CPAP Return	ESS at CPAP Issue	ESS(off treatment) at CPAP Return
1.	96	89	21	6
2.	178	130 (bariatric surgery)	20	0
3.	97	84	18	7
4.	128	103	16	8
5.	122	112	15	9
6.	93	85	9	3
7.	108	95	10	3
8.	104	84	8	0
9.	89	72	14	4
10.	100	93	14	0
11.	99	94	19	1
12.	132	124	16	3
13.	120	113	7	5
14.	99	90	13	5
15.	97	89	14	4
Mean	110.8	97.1	14	4

Comparison of ESS at time of CPAP issue & return in patients who lost weight

Conclusions:

- Patients should always be encouraged to lose weight and try lifestyle measures as part of treatment for OSAHS
- Reversible medical & surgical causes should be addressed in suspected cases presenting with OSA symptoms
- Clinical review of patients receiving CPAP should be carried out by a sleep specialist to confirm the on-going diagnosis of OSAHS and to check CPAP compliance.

References:

(1) [Am J Respir Crit Care Med.](#)1999 Apr;159(4 Pt 1):1108-14.Long-term use of CPAP therapy for sleep apnea/hypopnea syndrome.[McArdle N](#), [Devereux G](#), [Heidarnejad H](#), [Engleman HM](#), [Mackay TW](#), [Douglas NJ](#)

