

Table S1 Search Strategy (Medline Ovid)

1	Sleep Apnoea Syndromes/ or Sleep Apnoea, Obstructive/	30535
2	Mandibular Advancement/	1736
3	Patient Compliance/	54886
4	Obstructive sleep apnoea.mp	3798
5	OSA.mp.	10389
6	Oral Appliance.mp.	486
7	Mandibular advancement appliance.mp.	0
8	Patient adherence.mp.	2838
9	Patient compliance.mp.	2838
10	1 or 4 or 5	34644
11	2 or 6	2098
12	3 or 8 or 9	63355
13	10 and 11 and 12	99

Table S2 Excluded Studies along with the reason for exclusion

Sr. no.	Study	Reason for Exclusion
1	Bachour et al, 2016	Excluded (Wrong outcome –no information in regard to influence of variables on patient adherence)
2	Banhiran et al, 2014	Excluded (Wrong outcome –no information in regard to influence of variables on patient adherence)
3	Basoglu et al, 2012	Excluded (Wrong outcome –no information in regard to influence of variables on patient adherence)
4	Bennett et al, 1998	Excluded (Wrong comparator- CPAP vs OA)
5	Ferguson et al, 1996	Excluded (Wrong comparator- CPAP vs OA)
6	Freidman et al, 2010	Excluded (Wrong outcome –no information in regard to influence of variables on patient adherence)
7	Gagnadoux et al, 2009	Excluded (wrong comparator –CPAP vs OA)
8	Gindre et al, 2008	Excluded (wrong outcome –no information in regard to influence of variables on patient adherence)
9	Neill et al, 2002	Excluded (Wrong outcome –no information in regard to influence of variables on patient adherence)
10	Peled et al, 2009	Excluded (Wrong outcome –no information in regard to influence of variables on patient adherence)
11	Randerath et al, 2002	Excluded (Wrong comparator –CPAP vs OA)
12	Tavares et al, 2009	Excluded- Full Text Not available
13	Tsai et al, 2004	Excluded (Wrong outcome –no information in regard to influence of variables on patient adherence)
14	Vanderveken et al, 2012	Excluded (Wrong study design)

Table S3. Categorisation of the studies based on the influencing factor

Sr no.	Exposure of interest	Study
1	Disease and Patient Characteristics	De Almeida et al, 2005
		Dieltjens et al, 2013
		Ghazal et al, 2009
		Izci et al, 2005
		McGown et al, 2001
		Brette et al, 2012
		Dieltjens et al, 2015
		Ingman et al, 2013
		Nerfeldt et al, 2016
		Prescinotto et al, 2015
		Rose et al, 2002
		Saglam-Aydinatay et al, 2018
		Tsuda et al, 2010
3	Appliance Fabrication and Titration Procedures	Gagnadoux et al, 2017
		Johal et al, 2017
		Lee at al, 2013
		Wang et al, 2014
		Zhou et al, 2012
		Al-Dharrab et al, 2017
		Dieltjens et al, 2013
		Ghazal et al, 2009
		Quinnell et al, 2014
		Freidman et al, 2012
		Vanderveken et al, 2008
4	Side Effects	Attali et al, 2016
		De Almeida et al, 2005
		Izci et al, 2005
		Makihara et al, 2016
		McGown et al, 2001
		Bates et al, 2006
		Clark et al, 2000
		Freidman et al, 2012
		Dieltjens et al, 2015
		Haviv et al, 2017
		Nishigawa et al, 2017
		Rose et al, 2002
		Tsuda et al, 2010
Vecchierini et al, 2016		
4	Psychological & Social Factors	Attali et al, 2016
		Carballo et al, 2016
		De Almeida et al, 2005
		Dieltjens et al, 2013
		Izci et al, 2005

		Makihara et al, 2016
		McGown et al, 2001
		Brette et al, 2012
		Haviv et al, 2017
		Nishigawa et al, 2017
		Rose et al, 2002
		Saglam-Aydinatay et al, 2018

Table S4. Risk of bias assessment for RCTs using Cochrane Risk of Bias Tool

1	Al Dharrab 2017	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"The patients were then simply randomised to treatment with either Type A or Type B appliance."
ii	Allocation Concealment (Selection Bias)	Unclear risk	No clear description
iii	Blinding of outcome assessment (Detection Bias)	Unclear risk	No clear description
iv	Incomplete Outcome Data (Attrition Bias)	Low risk	"No patients were dropped from the study for any reason."
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
2	Cunali 2011	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"...study was a double-blind, Randomised, and controlled trial in which patients were distributed..."
ii	Allocation Concealment (Selection Bias)	Low risk	"The investigator who was blinded to the Randomisation has only applied all study instruments of evaluation such as the RDC, while a second investigator did the Randomisation and was responsible for explaining the exercises to the patients."
iii	Blinding of outcome assessment (Detection Bias)	Unclear risk	No clear description
iv	Incomplete Outcome Data (Attrition Bias)	Low risk	Small number of dropouts in both of the groups (Support therapy n=1 dropout vs Placebo Therapy n=2 dropout)
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
3	Gagnadoux 2017	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	High risk	"This prospective non Randomised study was conducted..."
ii	Allocation Concealment (Selection Bias)	High risk	Lack of Randomisation and allocation concealment

iii	Blinding of outcome assessment (Detection Bias)	Low risk	"Outcome assessors were unaware of the device assignment."
iv	Incomplete Outcome Data (Attrition Bias)	High risk	Large number of dropouts in both groups (Ready-made n=39 dropouts and Custom-made n= 23 dropouts) and imbalanced Randomisation (Ready-made n= 125 vs Custom-made n=95) due to lack of Randomisation.
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
4	Lee 2013	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	High risk	No description of Randomisation and allocation concealment. "Two groups of patients were included in the present study; one group of patients was prescribed mono-bloc MAD and the other group of patients was bi-bloc MAD."
ii	Allocation Concealment (Selection Bias)	High risk	No description of allocation concealment. "Two groups of patients were included in the present study; one group of patients was prescribed mono-bloc MAD and the other group of patients was bi-bloc MAD."
iii	Blinding of outcome assessment (Detection Bias)	Unclear risk	No clear description
iv	Incomplete Outcome Data (Attrition Bias)	Low risk	No dropouts or withdrawal as 153 patients were enrolled and 153 were analysed
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
5	Quinnell 2014	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"This open-label, randomised, controlled, crossover trial was undertaken at a UK sleep centre."
ii	Allocation Concealment (Selection Bias)	Unclear risk	No clear description
iii	Blinding of outcome assessment (Detection Bias)	Unclear risk	No clear description

iv	Incomplete Outcome Data (Attrition Bias)	Low risk	Small number of dropouts only in one group (n=3 lost to follow-up)
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
6	Vanderveken 2008	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"Participants were randomly allocated (concealed Randomisation) to either treatment sequence A or B."
ii	Allocation Concealment (Selection Bias)	Low risk	"...allocated (concealed Randomisation) to either treatment sequence A or B."
iii	Blinding of outcome assessment (Detection Bias)	Low risk	"Sleep recordings were scored manually in a standard fashion by a qualified sleep technician blinded to the subject's treatment status."
iv	Incomplete Outcome Data (Attrition Bias)	Low risk	No dropouts reported
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
7	Wang 2014	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"Randomisation at the beginning of the study."
ii	Allocation Concealment (Selection Bias)	Unclear risk	No clear description
iii	Blinding of outcome assessment (Detection Bias)	Unclear risk	No clear description
iv	Incomplete Outcome Data (Attrition Bias)	Low risk	Smaller no of dropouts (n=2 dropouts)
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
8	Zhou 2012	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"The 16 patients enrolled were randomly divided into two groups..."
ii	Allocation Concealment (Selection Bias)	Unclear risk	No clear description
iii	Blinding of outcome assessment (Detection Bias)	Unclear risk	No clear description

iv	Incomplete Outcome Data (Attrition Bias)	Low risk	"All of the patients finished the treatment as expected..."
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
9	Johal 2017	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"...random identification numbers were compiled from Altman's randomisation table to one of the two treatment groups, using a block randomisation method..."
ii	Allocation Concealment (Selection Bias)	Low risk	"Opaque envelopes to conceal the allocation were labelled with identification numbers only..."
iii	Blinding of outcome assessment (Detection Bias)	Low risk	"Data analysis, was undertaken blind to the intervention by a statistician with coded data, using SPSS."
iv	Incomplete Outcome Data (Attrition Bias)	Low risk	Balanced dropouts from both the groups (Ready-made n= 6 and Custom-made n=4), "intention to treat analysis demonstrated that dropouts did not affect the validity of the current study results."
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.
10	Ghazal 2009	Risk of Bias	Support for judgement
i	Randomisation (Selection Bias)	Low risk	"Enrolled patients were Randomised according to a computer-generated Randomisation list."
ii	Allocation Concealment (Selection Bias)	Unclear risk	Not described
iii	Blinding of outcome assessment (Detection Bias)	Unclear risk	No clear description
iv	Incomplete Outcome Data (Attrition Bias)	Low risk	Balanced number of withdrawals from both the groups at follow-up 1 and 2.
v	Selective Reporting	Low risk	The authors reported all the pre-specified outcomes.

Table S5. Risk of bias assessment for observational studies using the QUIPS tool

Sr. no.	Study ID	Bias Domains					
		Study Participation	Study Attrition	Prognostic Factor Measurement	Outcome Measurement	Study Confounding	Statistical Analysis and Reporting
1	Attali 2006	Low	Low	Moderate	Low	Moderate	Low
2	Carballo 2016	Moderate	Low	Moderate	Low	Moderate	Low
3	De Almeida 2005	Low	Low	Moderate	Low	Moderate	Low
4	Izci 2005	Low	Low	Moderate	Low	Low	Low
5	Makihara 2016	Low	Low	Moderate	Low	Moderate	Low
6	McGown 2001	Low	Low	Moderate	Low	Moderate	Low
7	Bates 2006	Low	Low	Moderate	Low	Moderate	Low
8	Brette 2006	Low	Moderate	Low	Low	Moderate	Low
9	Clark 2000	Low	Low	Moderate	Low	Moderate	Low
10	Freidman 2012	Low	Low	Moderate	Low	Moderate	Low
11	Dieltjens 2013	Low	Low	Moderate	Low	Moderate	Low
12	Dieltjens 2015	Low	Low	Low	Low	Low	Low
13	Haviv 2017	Low	Low	Moderate	Low	Moderate	Low
14	Ingman 2013	Low	Low	Low	Low	Moderate	Low
15	Nerfeldt 2016	Moderate	Moderate	Low	Low	Moderate	Low
16	Nishigawa 2017	Low	Moderate	Moderate	Low	Moderate	Low
17	Prescinotto 2015	Moderate	Low	Low	Low	Moderate	Low
18	Rose 2002	Low	Low	Moderate	Low	Moderate	Low
19	Saglam-Aydinatay 2018	Moderate	Low	Low	Low	Moderate	Low
20	Tsuda 2004	Low	Low	Low	Low	Moderate	Low
21	Vecchierini 2016	Low	Low	Low	Low	Moderate	Low