

# Search strategy

## MEDLINE

Host: PubMed

Date of search: August 27<sup>th</sup>, 2015

Data of update: December 13<sup>th</sup>, 2016

Total matches: 312

- #1. "Continuous Positive Airway Pressure"[Mesh]
- #2. "Sleep Apnea, Obstructive"[Mesh]
- #3. OSA (non mesh)
- #4. OSAH (non mesh)
- #5. CPAP (non mesh)
- #6. #1 OR #2 OR #3 OR #4 OR #5
- #7. Liver Cirrhosis"[Mesh]:
- #8. "Non-alcoholic Fatty Liver Disease"[Majr]
- #9. "Transaminases"[Mesh]
- #10. "Liver"[Mesh]: 7 match
- #11. NAFLD (non mesh): 26 match
- #12. NASH (non mesh): 13 match
- #13. #8 OR #9 OR 10 OR #11 OR 12
- #14. #6 AND #13 #12. "Randomized Controlled Trial" [Publication Type]

## TRIPDATABASE

TRIP DATABASE Host: Tripdatabase.com

Date of Search: August 27<sup>th</sup>, 2015

Data of update: December 13<sup>th</sup>, 2016

Total matches: 170

- #1. (obstructive sleep apnea)(continous positive ariway pressure)(placebo)(liver )":
- #2. obstructive sleep apnea non alcoholic fatty liver:
- #3. obstructive sleep apnea liver: Filter: Classification/Clinical trial

## COCHRANE DATABASE OF SYSTEMATIC REVIEWS

Host: Wiley

Date of search: August 27<sup>th</sup>, 2015

Data of update: December 13<sup>th</sup>, 2016

- #1 ippv or nppv or niv or niav or cpap or (positive and pressure)
- #2 MeSH descriptor: explode all trees
- #3 MeSH descriptor: [Respiration, Artificial] explode all trees
- #4 #1 or #2 or #3
- #5 MeSH descriptor: [Sleep Apnea, Obstructive] explode all trees
- #6 MeSH descriptor: [Obesity Hypoventilation Syndrome] explode all trees
- #7 MeSH descriptor: [Sleep Apnea Syndromes] explode all trees
- #8 (obstruct\* or sleep) and (apnea\* or apnoe\*)
- #9 obstruct\* and (hypopnea\* or hypopnoea\* or hypoapnea\* or hypoapnoea\*)
- #10 Mesh descriptor: [Liver Cirrhosis]: explode all trees
- #11 Mesh descriptor: [Non-alcoholic Fatty Liver Disease]: explode all tres

#12 osahs  
#13 osa  
#14 osas  
#15 nafld  
#16 nash  
#17 #5 or #6 or #7 or #8 or #9 or #12 or #13 or #14  
#18 #10 or #11 or #15 or #16  
#19 #4 and #15 #20 #17 or 18

### **LILACS**

Host: bvsalud.org

Date of search: August 27<sup>th</sup>, 2015

Data of update: December 13<sup>th</sup>, 2016

Matches: 0

#1. Continuous Positive Airway Pressure  
#2. Sleep Apnea, Obstructive  
#3. OSA  
#4. OSAH  
#5. CPAP  
#6. #1 OR #2 OR #3 OR #4 OR #5  
#7. Liver Cirrhosis  
#8. Non-alcoholic Fatty Liver Disease  
#9. Transaminases  
#10. Liver  
#11. NAFLD  
#12. NASH  
#13. #8 OR #9 OR 10 OR #11 OR #12

### **EPISTEMONIKOS**

Host: Epistemontos.org

Date of search: August 27<sup>th</sup>, 2015

Data of update: December 13<sup>th</sup>, 2016

Matches: 32

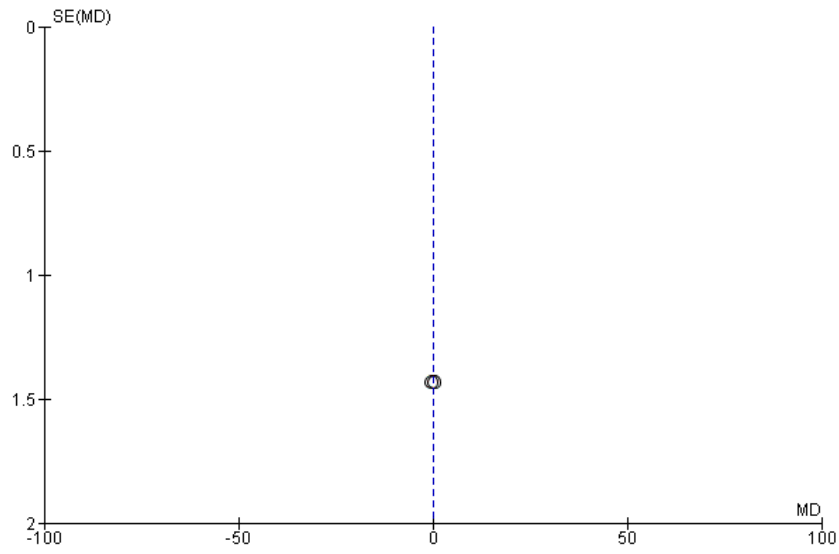
Strategy: (ventilation OR nippv OR nppv OR niv OR niav OR cpap OR (positive AND pressure)) AND (((liver OR non alcoholic fatty liver disease) AND cirrhosis) OR NASH OR NAFLD)

Filter: Classification/primary studies

**Table S1**—Excluded studies.

Author	Year	No. of Patients (intervention/ placebo)	Study Type	Intervention	Control	Outcome
Chen	2003	6/4	Observational	CPAP	Sub therapeutic CPAP	Change on aminotransferases
Shriper	2010	47	Observational	CPAP	Sub therapeutic CPAP	Change on inflammatory markers
Cifci	2010	24/24	Observational	CPAP	Sub therapeutic CPAP	Change on inflammatory markers
Buttacavoli	2016	12	Observational	CPAP	CPAP adherence	Change on liver steatosis and fibrosis

**Figure S1**—Funnel plot for AST change after CPAP treatment.



**Figure S2**—Funnel plot of ALT Change after CPAP treatment.

