Search strategy

MEDLINE
Host: PubMed
Date of search: August 27th, 2015
Data of update: December 13th, 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 27th, 2015
Data of update: December 13th, 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 27th, 2015
Date of update: December 13th, 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 hypopnoea*)
#10 Mesh descriptor: [Liver Cirrhosis]: explode all trees
#11 Mesh descriptor: [Non-alcoholic Fatty Liver Disease]: explode all tres
LILACS
Host: bvsalud.org
Date of search: August 27th, 2015
Data of update: December 13th, 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: Epistemonikos.org
Date of search: August 27th, 2015
Data of update: December 13th, 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>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>No. of Patients (intervention/placebo)</th>
<th>Study Type</th>
<th>Intervention</th>
<th>Control</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chen</td>
<td>2003</td>
<td>6/4</td>
<td>Observational</td>
<td>CPAP</td>
<td>Sub therapeutic CPAP</td>
<td>Change on aminotransferases</td>
</tr>
<tr>
<td>Shriper</td>
<td>2010</td>
<td>47</td>
<td>Observational</td>
<td>CPAP</td>
<td>Sub therapeutic CPAP</td>
<td>Change on inflammatory markers</td>
</tr>
<tr>
<td>Cifci</td>
<td>2010</td>
<td>24/24</td>
<td>Observational</td>
<td>CPAP</td>
<td>Sub therapeutic CPAP</td>
<td>Change on inflammatory markers</td>
</tr>
<tr>
<td>Buttacavoli</td>
<td>2016</td>
<td>12</td>
<td>Observational</td>
<td>CPAP</td>
<td>CPAP adherence</td>
<td>Change on liver steatosis and fibrosis</td>
</tr>
</tbody>
</table>
**Figure S1**—Funnel plot for AST change after CPAP treatment.

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