Clinical Question: “For adults in the outpatient setting, what is the effectiveness of oxygen use for non-hypoxic hospice patients?”

Results: An exhaustive search of various databases did not yield any studies for non-hypoxic hospice patients. Therefore, the following key summary of the literature of studies involving hospice patients with dyspnea is offered to provide some guidance:

- Oxygen provides no additional symptomatic benefit for relief of refractory dyspnea in patients with life-limiting illnesses, as compared to room air (1,3)
- Both air and oxygen can have a significant effect in reducing dyspnea at rest in patients with advanced cancer (2)
- One single intervention will probably not help with breathlessness (4)

Clinical Options: Based on the literature, the following options are offered for consideration:

- Less burdensome strategies should be considered after a brief trial assessment of the therapeutic effect of oxygen and air treatment on the individual patient who is dyspneic (1,2), regardless of that patient’s arterial oxygen saturation or if the patient has previously been receiving oxygen therapy (2)
- Moving gas near the nasal passages, and specifically delivered via a nasal cannula, can lead to improved symptoms; that gas need not be oxygen (1)
  - As air motion seems to be an operative factor in relief of breathlessness, a simple hand-held or table-top fan could be a helpful and inexpensive first step (1)
- Oxygen provision can often provide a further barrier for patients, as well as incurring health-care costs, its use in non-hypoxic patient should be avoided, unless there is a good clinical reason otherwise (2,4)
  - If oxygen is effective, then compressed air could be supplied to patient over longer periods at much less cost (2)

Recommendation: The lack of literature for this topic seems to warrant a systematic review using an expanded search of additional databases. This targeted systematic review could then provide further clarification for this medical issue. The Kaiser Permanente Department of Clinical Analysis, Technology Assessment & Guidelines Unit, conducts systematic reviews on these types of clinical topics. (Email request and question to: scal.med-technology-agu@kp.org)
The Effectiveness of Oxygen for Non-hypoxic Hospice Patients

A Literature Review of the Evidence

March 2011

References


**The Effectiveness of Oxygen for Non-hypoxic Hospice Patients**

*A Literature Review of the Evidence*

March 2011

**Ranking and Leveling of the Evidence**

<table>
<thead>
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<th>LEVELS OF STUDIES</th>
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<td>Large Sample Randomized Controlled Trials</td>
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<td>7</td>
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<td></td>
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<td>5</td>
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<td>Case-Controlled Studies</td>
<td></td>
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