

Claims

1. A nasal ventilation mask having a body defining an interior configured to cover a patient's nose while leaving the patient's mouth uncovered, said mask having an O₂ port for introducing
5 oxygen into the interior of the mask, and an exterior opening under a nose region of the mask, adapted to overlie a patient's lip region, wherein said opening is adapted to scavenge gases expelled orally by a wearer, and an integrated end-tidal CO₂ monitor for monitoring end-tidal CO₂ expelled nasally and orally by a patient.
- 10 2. The mask according to claim 1, wherein the mask is adapted for use as an oxygen transport mask, or as a ventilation mask providing O₂ and anesthesia gases, and said end-tidal CO₂ monitor is adapted for simultaneously or sequentially monitoring end-tidal CO₂.
3. The mask according to claim 1 or claim 2, wherein said mask is adapted for CPAP pre-
15 operatively, intra-operatively, and/or post-operatively.
4. The mask according to any one of the preceding claims, wherein said mask is adapted for connection to a resuscitator bag such that a patient's mouth and airway are not obstructed by the resuscitator bag, whereby to allow for direct laryngoscopy and intubation.
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5. The mask according to any one of the preceding claims, said mask having a ventilation port and a gas monitoring attachment integral to or attached to the ventilation port.
6. The mask according to any one of the preceding claims, further comprising an
25 anesthesiologist controlled 2-way, 3 port valve permitting an anesthesiologist to switch between separately monitoring nasal and oral end-tidal CO₂, or simultaneously monitoring nasal and oral end-tidal CO₂, wherein when oral end-tidal CO₂ monitoring is chosen, ventilation gases expelled orally by the patient are also monitored.
- 30 7. The mask according to any one of the preceding claims, said mask further including a scavenger line for diverting at least a portion of the scavenged gas to an end-tidal CO₂ monitor.

8. The mask according to claim 7, wherein a connector is provided where the end-tidal CO₂ monitoring line intercepts the scavenger line, diverting gas flow, resulting in a positive pressure relative to the end-tidal CO₂ line, whereby to permit gases to be sampled from the scavenger line.

9. An anesthesia mask having a body defining an interior configured to cover a patient's nose while leaving the patient's mouth uncovered, said mask having a built in scavenger system for collecting anesthetic gases that may leak out around a mouth and nose of a patient, one or more head straps for holding the anesthetic mask in place over the nose of the patient, and an integrated end-tidal CO₂ monitor for monitoring end-tidal CO₂ expelled nasally and orally.

10. A nasal ventilation mask having tabs or eyelets for attaching the mask anteriorly with a mask anchor, or posteriorly with a traditional anesthesia mask strap, said mask characterized by one or both of the following features:

(a) adapted to accommodate a combined anterior-posterior head strap attached to the mask alone, or to the mask and a support surface, to hold a patient's head and/or neck against movement; and

(b) adapted to secure a patient's head with a head strap to a support surface, wherein the patient's head and the support surface remain in a desired position even when a provider changes the patient's head and/or neck angles.

11. A nasal mask, wherein the mask is usable as an oxygen transport mask or as a ventilation mask for providing O₂ and anesthesia gases, and for monitoring end-tidal CO₂.

12. The mask according to claim 11, said mask having one or more ports for monitoring end-tidal CO₂, wherein the mask is adapted for use for CPAP pre-operatively, intra-operatively, and/or post-operatively.

13. The mask according to claim 11 or claim 12, said mask having ports for monitoring end-tidal CO₂, wherein the mask is adapted to be connected to a resuscitator bag such that a patient's mouth and airway are not obstructed by the resuscitator bag, whereby to allow for direct laryngoscopy and intubation.

14. The mask according to any one of claims 11 to 13, wherein the mask is attachable anteriorly with a mask anchor, or posteriorly with a conventional anesthesia mask strap.

15. The mask according to any one of claims 11 to 14, said mask having an O₂ port adapted for introduction of oxygen into the mask, a ventilation port and a gas monitoring attachment integral to or attached to the mask.

16. The mask according to any one of claims 11 to 15, said mask having a built in scavenger system for collecting anesthetic gases that may leak out from around a patient's mouth and/or nose.

17. The mask according to any one of claims 11 to 16, said mask having a chin strap adapted for application to a patient's submental space, attached to said mask, for applying pressure to force a patient's tongue against the patient's soft palate and induce an obstruction of the retro-glossal space, whereby to reduce or prevent leakage of gases out of the patient's mouth and allow the patient to breathe out the nose, wherein the chin strap is adapted to release pressure, if needed, during exhalation to prevent an expiratory obstruction.

18. A CPR mask for nose-to-mouth and/or mouth-to-mouth resuscitation, comprising a body shaped to cover a nose and/or mouth of a patient, said mask including a CO₂ absorber for eliminating at least in part a rescuer's exhaled CO₂ delivered to the patient.

19. The mask according to claim 18, wherein the CO₂ absorber is coated on an inside surface of the mask.

20. The mask according to claim 18 or claim 19, wherein the mask further includes a ventilation tube, wherein the CO₂ absorber is located in the ventilation tube.

21. The mask according to claim 20, further including a biological filter, incorporated into the ventilation tube.

22. The mask according to any one of claims 18 to 21, further including a one-way valve.

23. The mask according to any one of claims 18 to 22, including straps adapted for holding the mask to a head of the patient.

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24. The mask according to any one of claims 18 to 23, wherein the mask further includes a compliant periphery adapted to conform to a face of the patient, wherein the periphery includes a soft, compliant air bladder or a resiliently deformable foam cushion.

10 25. The mask according to any one of claims 18 to 24, further including a biological filter incorporated into an inside of the mask.