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Respiration characteristics in subjects diagnosed as having nasal obstruction.

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The purpose of this study was to determine the respective oral and nasal contributions to total respiration in patients scheduled for surgical corrections of nasal obstruction. The effect of anterior nares expansion and/or nasal decongestant administration on the nasal component of breathing was also examined in these patients. Although variability among subjects was demonstrated in the ratio of nasal respiration to total respiration, 25% of the "nasally-obstructed" patients were 100% nasal breathers and no patient had a nasal component less than 18% of total respiration. Great variability existed among the patients in their response to nares expansion and/or decongestant administration. Collectively, they demonstrated no significant mean increase in nasal respiration with nares expansion alone. The patients demonstrated an increase with administration of the decongestant and with decongestant combined with nares expansion. The latter condition resulted in an increase that was greater than with decongestant alone. The implication of this study is that the traditional diagnostic terms "mouth breathing" or "nasal obstruction" are not useful. They do not describe the type, location, or severity of an obstruction or the relative contribution of the nose and mouth to respiration. Many patients who experience symptoms or have signs of nasal obstruction can functionally compensate to maintain 100% nasal breathing.

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