BÖLÜM 8

Yüksek Akımlı Nazal Kanül Oksijen Tedavisi: Fizyolojik Etkiler ve Klinikte Kullanımı

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GİRİŞ

Oksijen tedavisi hipoksemik solunum yetmezliğinde temel destek tedavisidir, akut solunum yetmezliğinde nazal kanül ve yüz maskesi ile standart oksijen tedavisi ilk basamak tedaviyi oluşturmaktadır. Ancak standart oksijen tedavisinde cihazların sağlayabildiği maksimum akış oranı yetersiz ısı ve nem uygulaması nedeni ile sınırlıdır.

Standart oksijen tedavisinde nazal kanül veya maske ile uygulanan oksijen akımı 15 L/dak'ya kadar ayarlanabilmektedir ancak bu akımın akut solunum yetmezliği olan bir hastanın inspiratuvar akışından çok daha düşük olduğu kabul edilmektedir. Ayrıca oda havası ek oksijeni seyreltmekte ve sonuçta alveollere ulaşan fraksiyone oksijen (FiO_2) miktarında belirgin azalma olmaktadır.

Son yıllarda yüksek akımlı oksijen verebilen yeni cihazlar birçok klinik durumda güvenli ve yararlı bir destek tedavisi olarak ortaya çıkmıştır. Yüksek akımlı nazal kanül oksijen (YANKO) tedavisi potansiyel faydalarını birçok mekanizma aracılığı ile sağlamaktadır (1-5).

YÜKSEK AKIMLI NAZAL KANÜL OKSİJEN TEDAVİSİNİN FİZYOLOJİK ETKİLERİ

Yüksek akımlı nazal kanül oksijen (YANKO) tedavisinde verilen ısıtılmış ve nemlendirilmiş oksijenin birçok fizyolojik etkisi vardır (Şekil 1) (1,2). YANKO tedavisinde;

i. Yüksek akım anatomik ölü boşluktaki karbondioksitin atılmasını sağlar.

ii. Yüksek akım hava yolundaki direnci aşar, nazofarenkste pozitif hava yolu basıncı oluşturur, bu sayede akciğer volümünde artış ve kapalı alveollerin açılması sağlanır.

lirken hasta bazında düşünülmelidir. Ayrıca YANKO tedavisi sırasında olgularda klinik düzelme sağlanamadığı durumlarda entübasyon geciktirilmemelidir.

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