



## ANESTEZİ UYGULAMALARINDA NON-İNVAZİV KARBONDİOKSİT ÖLÇÜM YÖNTEMLERİ

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### GİRİŞ

Anestezi altındaki hastalarda ve yoğun bakımlarda solunum durumunu değerlendirmek için altın standart arterial kan gazı (AKG) analizidir. AKG analizi hem invaziv olduğu için hem de arterial ponksiyon yapmak uzmanlık ve beceri gerektirdiği, işleme bağlı enfeksiyon, doku, sinir ve damar hasarı gibi komplikasyonlar gelişebileceğinin riskli bir işlemidir. Parsiyel karbondioksit basıncı ( $P_{aCO_2}$ ) ölçümü için invaziv yöntemler arasında AKG, kapiller kan gazı analizi (KKG) ve venöz kan gazı (VKG) gibi yöntemler yer alır. Ayrıca  $P_{CO_2}$  ölçümü için kapnografi ve transkutanöz karbondioksit ( $CO_2$ ) ölçümü gibi non-invaziv yöntemler de kullanılmaktadır. Bu yöntemlerin klinik kullanımındaki avantajları ve dezavantajları Tablo 1'de gösterilmiştir. Kronik solunum yetmezliği, hastaların nakil işlemleri kardiyopulmoner resüsitasyon, hasta kontrollü analjezi uygulamaları ve prosedürel sedasyon işlemleri sırasında non-invaziv  $CO_2$  ölçüm yöntemlerinden yararlanılabilir (1).

### END-TİDAL $CO_2$ ÖLÇÜM YÖNTEMLERİ

Hem entübe hem de entübe olmayan hastalarda ekshale edilen  $CO_2$ 'nin değerlendirilmesi, son birkaç dekada daha yaygın kullanılmaktadır ve hasta izlenmenin ayrılmaz bir parçası haline gelmiştir. Ekshale edilen  $CO_2$ 'nin izlenmesi

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