ILCOR (International Liaison Committee on Resuscitation) 2005 yılında kardiak arrest yönetimi ve kardiyopulmoner resüsitasyon kalitesinin monitörizasyonu ile ilişkili yayınlanmış literatürleri özetlemiştir (1). Pek çok yıldır araştırmacılar, gelişmiş mankenleri kullanarak kardiak arrest senaryoları esnasında KPR kalitesini değerlendirmişlerdir. Manken monitörizasyon çalışmaları farklı resüsitasyon stratejilerinde KPR kalitesinin karşılaştırmasına izin verir. KPR sırasında hassas monitörizasyonun kullanılmasının; KPR'da sonuçların iyileştirilmesini sağlamada umut verici olduğu bildirilmektedir.

KPR sırasında KPR kalitesini ve özellikle göğüs kompresyonlarının etkinliğini gösteren invaziv /non-invaziv teknikler monitorizasyon için kullanılmalıdır.

Neleri monitörize edebiliriz :

1. Klinik Bulgular (solunum eforu, göz açılması vb.)
2. KPR-geri bildirim (suflör) araçları
3. Nabız takibi
4. EKG monitörizasyonu-VF dalga formu analizi
5. End-tidal CO_2 dalga form kapnografi
6. Kan incelemesi (kan örnekleme, kan gazı analizi)
7. Santral venöz oksijen satürasyonu
8. İnvaziv kardiyovasküler monitörizasyonu (devamlı arteriyel KB, SVB takibi vb.)
9. USG
10. Serebral oksimetre ile non-invaziv rejyonel serebral oksijen saturasyonu ölçümü

Bu monitorizasyon yöntemlerinden bazılarına daha detaylı olarak değinilecektir.

EKG

Elektrokardiyografi, kalpteki elektriksel aktiviteyi çıktığı odağın orijini ve hızı hakkında fikir vererek kaydeder. Kalbin beş fizyolojik özelliği ritmiklik, iletkenlik, uyarılabilirlik, kontraktilite ve tonus olup elektrokardiyogram bize ilk üç özelliği hakkında bilgi verir (2). İstirahat halindeyken kalbin ileti sistemine ait hücreler ve miyokard polarize durumdadır. Hücre membranı üzerinden ani iyon geçişi depolarizasyonu tetikler, ileti sistemi boyunca yayılan elektriksel sinyal oluşturur ve miyokard hücrelerinin kontraksiyonunu tetikler (3).

Normal sinüs ritminde depolarizasyon, sino-atriyal (SA) düğüm adı verilen ve superior vena kavanın sağ atriyuma giriş yerine yakın yerleşim özellikli "pacemaker" hücre grubundan başlar. Daha sonra depolarizasyon dalgası SA düğümden atriyal miyokarda yayılır. Bu durum EKG'de P dalgası olarak görülür. Bu elektriksel uyarıya mekanik yanıt atriyal kontraksiyondur (2,3).

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