

## Kritik Travma Hastalarında Kardiyopulmoner Resusitasyonun Yönetimi

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### Giriş

Travmatik kardiyak arrest, travmanın ortak tetikleyici faktör olarak rol oynadığı olaylar dizisinin sonucunda gelişen kardiyak arresttir. Travmatik kardiyak arrest (hipovolemik şok, obstrüktif şok, nörojenik şok) tıbbi nedenlere bağlı gelişen kalp durmasından farklı olduğundan dolayı yaklaşım ve tedavi protokollerinin de farklı olması gerekmektedir.

Dünya genelinde travma, her yıl sıtmaya, tüberküloz ve HIV'in toplamından daha fazla ölümden sorumludur (1). Yakın zamanda yapılan bazı araştırmalar medikal bir sebepten dolayı gerçekleşen kardiyak arrestlerde sağkalım oranının %5 ile %10 arası olduğunu göstermiştir (2). Travmaya bağlı kardiyak arrestler de ise sağ kalım %1,6 ile %32 arasında değişmektedir (3-7). Travma esnasında olay yerinde hayatını kaybeden ve hastaneye sevki yapılmayan vakaların kayıt dışı kaldığı düşü-

nülürse travmaya bağlı sağ kalım oranlarının daha da düşük olduğu söylenebilir.

İleri kardiyak yaşam desteğinde arrest hastalarda her zaman ön planda kardiyak bir neden düşünülmüştür (8). Fakat travma va-kalarında kardiyak arrest genellikle miyokard enfarktüsü gibi birincil bir kalp hastalığına bağlı değildir. Tıbbi nedenlere bağlı kardiyak arrestte göre daha yüksek bir mortalite oranına sahip olsa da sağ kalanlar arasında nörolojik sonuçların daha iyi olmasından kaynaklı travmatik kardiyak arrest'de (TKA) (Açılımını yaz) resusitasyon çabaları en az tıbbi nedenli kardiyak arrestler kadar önemlidir (9,10).

Bir peri-arrest durumu bilinç durumunda bozulma, kardiyovasküler anstabilite, hipotansiyon ve periferik nabızların kaybı ile karakterizedir. Eğer bu durum hızlı bir şekilde tedavi edilmez ise kardiyak arreste ilerlemesi kaçınılmazdır. Travmatik kardiyak arrestte tanı aşamasında hastada genellikle bilinç

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## Pediatrik Travmatik Kardiyak Arrest

Perdiatrik TKA için hazırlanan çoğu kılavuz yetişkin popülasyondaki verilerden türetilmiştir (66). Pediatrik TKA'da net kuralların olmamasından dolayı bu hastaların yönetimi zor ve karmaşık bir süreçtir. TKA'lı çocukların yetişkinlere göre daha yüksek sağ kalım oranlarına sahiptirler ancak daha kötü nörolojik sonuçlardan muzdariptirler (9).

## Travmaya Bağlı Kardiyak Arrest'de Ultrasonografi

Ultrasonografi travma hastalarının ilk değerlendirmesinde yillardır temel görüntüleme yöntemidir. Ultrason TKA'da kardiyak tamponat, pnömotoraks ve hemotoraksın hızlı tanısında ve hatta perikardiyal iğne dekompression da olduğu gibi tedavide de kullanılabilir. Ayrıca USG TKA'lı hastalarda nabızsız elektriksel aktivite olduğundan şüphelenilen bir ritimde kardiyak aktiviteyi değerlendirmek için kullanılabilir<sup>35</sup>. TKA'lı hastalarda kardiyak ultrasonografi sağ kalımı tahmin etmede kullanılabilir. Başvuru sırasında USG'de kardiyak duvar hareketi olanların kariyak duvar hareketi olmayanlara göre daha yüksek sağ kalıma sahip oldukları görülmüştür (67).

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