NÖROANESTEZİ

23. BÖLÜM

Ayça SAYAN[1]

1.Giriş

Nöroanestezi; santral sinir sistemi (SSS) veya periferik sinir sisteminden (PSS) kaynaklanan veya nörolojik yaralanmalar sonucu yapılan invaziv ve girişimsel nörolojik işlemlerdeki anestezi ve analjezi uygulamalarıdır (1).

Nöroanestezinin hedefleri; iskemiye karşı serebral koruma, serebral oksijen metabolizma hızı (CMRO2) azaltılması, serebral kan akımının (SKA) ve serebral kan volümünün (SKV) azaltılması, kafa içi basıncının (KİB) düşürülmesi, otoregülasyonun ve uyarılmış potansiyellerin korunması, kısa uyanma dönemi ile birlikte solunum depresyonu, hipertansiyon ve titreme olmamasına dikkat edilmesidir.

2.Anestezik ajanların etkileri

Nöroanestezi pratiği; nörocerrahi işleme göre ameliyat olacak hastaların veya cerrahi sırasında hastaların beyin fonksiyonlarının devamını sağlamak için anestezik bakımı kapsamaktadır. Anestezi pratiğinde bazı anestezikler önem kazanmıştır fakat yine de tüm anesteziklerin beyin fizyolojisine etkilerinin bilinmesi gerekmektedir (Şekil 1).

2.1. İnhalasyon anestezikleri

SSS fonksiyonlarındaki etkileri, CMRO2, SKA, elektroensefalografi (EEG) ve uyarılmış potansiyellere etkileri ile ilişkilidir. CMRO2 ve SKA'daki değişiklikler nörolojik hastalığı olanlarda önemlidir ve hastalığın seyrini ve hatta nörocerrahinin performansını kötü etkileyebilir. İnhalasyon anestezikleri SKA'yı arttırıp beyin metabolizma hızını azaltırlar. Bu etki izofluranda çok daha belirgindir ve

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Hipotermi, IONM değerlerinde spinal cerrahide yalancı negatifliği arttırabilir. Bu durum, SSEP ve MEP değerlerindeki değişiklikler ile ilişkilidir, latens artışı ve iletim hızında azalmaya bağlıdır. 28 derecenin altındaki santral sıcaklıklarda hiç SSEP ve MEP kaydedilemez. Diğer fizyolojik değişiklikler IONM sırasındaki değerler ile ilişkili olabilir. Örneğin; glisemi, elektrolitlerdeki değişiklikler, dolaşan kan volümündeki azalma ve vena cava süperior'daki basıncın artması, bunların hepsi, uyarılmış potansiyellerdeki değişiklikler ile bağlantılıdır (62).

8.Sonuç

IONM, postoperatif nörolojik defisitler ve sekellerin belirlenmesinde çok yararlı bir metottur. IONM'nin uygun kullanımı ve nöral hasarın önlenmesi için anesteziyolog, cerrah ve nörofizyolojist arasında kooperasyonu gerektirir. Anestezistin tasarlanan cerrahi hakkında bilgi sahibi olması, uygulanan IONM tiplerini bilmesi, ilaçların ve anestezi tekniklerinin uyarılmış potansiyeller üzerine olan etkilerini anlaması gerekmektedir ki en uygun yaklaşımı seçebilsin, kaydedilen değerlerin kalitesini arttırabilsin. Aynı zamanda fizyolojik ve hemodinamik değerlerin stabil olmasını sağlayarak postoperatif hasar riskini ve görülme sıklığını azaltabilsin.

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