

## Bölüm 4

# NÖROMÜSKÜLER KAVŞAK HASTALIKLARINA GÜNCEL YAKLAŞIM

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### GİRİŞ

Nöromüsküler kavşak hastalıkları, presinaptik sinir sonlanması ile postsinaptik kas membranı arasındaki iletişimin çeşitli antikor, ilaç, toksin ya da genetik mutasyonlarla bozulduğu bir dizi hastalığı ifade eder. Bu yazıda nöromüsküler kavşak hastalıklarından en sık karşımıza çıkan myastenia gravisten geniş olarak, kısaca da Lambert Eaton myastenik sendrom (LEMS) ve botulismustan bahsedilecektir.

### MYASTENİA GRAVİS

Myastenia Gravis (MG); oküler, bulber, ekstremitte ya da solunum kaslarında aktivite ile artan güçsüzlük ile karakterize edinsel otoimmün bir hastalıktır <sup>1</sup>. Yapılan bölgesel çalışmalarda yıllık yaklaşık insidansı 7-23/1000000 ve prevalansı 70-320/1000000 olmak üzere nadir bir hastalıktır <sup>2</sup>. MG her yaşta görülebileceği gibi ikinci ve üçüncü dekatta kadın predominansı ile altıncı ve yedinci dekatta erkek predominansı ile bimodal bir dağılımı mevcuttur.

### İMMUNOPATOGENEZ

Myastenia gravis immunopatogenezinden önce nöromüsküler kavşağın fizyolojisinden bahsetmek gerekir. Nöromüsküler kavşak, kabaca presinaptik motor sinir sonlanması, sinaptik aralık ve postsinaptik kas plazma membranından oluşur. Presinaptik sinir sonlanması, kolin ve asetattan sentezlenmiş asetilkolini (ACh) içeren binlerce vezikül bulundurur. Post sinaptik membran, sinaptik aralığa salınan ACh'nin daha fazla alana etki edebilmesi için birçok girinti ve çıkıntıdan oluşan geniş bir yüzeye sahiptir. Motor sinir boyunca yayılan sinir aksiyon potansiyeli presinaptik uçta voltaj bağımlı kalsiyum kanallarının (VGCC) açılmasına neden olur. Kalsiyumun ACh veziküllerinin eksositozunu sağlaması sonucu ACh sinaptik aralığa yayılır. Postsinaptik membranın çıkıntılarında yoğunlaşan ACh

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Toksinin giriş yoluna göre gıda, yara, infant, yetişkin barsak kolonizasyonu, solunumsal ve iyatrojenik olarak altı tipi bulunur <sup>90</sup>. Klasik klinik bulgusu akut başlangıçlı bilateral kraniyal nöropatilerin eşlik ettiği simetrik yukarıdan aşağıya yayılan flask paralizidir <sup>92</sup>. Hastanın bilinci açık ve simetrik nörolojik defisitleri mevcut olup ateşi yoktur. Bulanık görme dışında duysal kayıp görülmez.

Ayrııcı tanıda MG, LEMS, Guillain-Barre sendromu, inme, kene paralizi ve intoksikasyonlar gibi birçok klinik tablo vardır. Rutin biyokimya, görüntüleme ve beyin omurilik sıvısı analizleri genellikle normaldir. Toksinin izole edilmesi kesin tanıyı koyar fakat bu her zaman mümkün olmaz. Aynı aileden birden fazla kişinin etkilenmesi ya da evde yapılmış konserve yeme öyküsü sorgulanmalıdır.

Primer mortalite nedeni solunum yetmezliği olduğundan hastalar yoğun bakım şartlarında monitörize edilerek izlenmeli, gerek olduğunda hızlı entübasyon ile mekanik ventilasyon sağlanmalıdır. Tanı konar konmaz antitoksin uygulanmalıdır. Antitoksin dolaşımdaki nörotoksinlere bağlanarak nöromusküler kavşaktaki inhibisyonu engeller. Bu nedenle tedavinin erken başlanması oldukça önemlidir.

## SONUÇ

Nöromusküler kavşak hastalıklarının tipik örneği olan myasthenia gravis, otoimmün kökenli bir hastalık olup başlıca tedavisi immunoterapilerdir. Mevcut tedaviler immun sistem üzerinde geniş etkiye sahip olup ciddi yan etkilere neden olabilmektedir. Deneysel immünolojik çalışmalarla MG patogenezinde etkili basamaklara yönelik daha spesifik tedaviler hedeflenmektedir <sup>12,93</sup>.

**Anahtar Kelimeler:** Myasthenia gravis, Lambert Eaton myastenik sendrom, botulismus

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