

# 48. BÖLÜM

## TİROİD DİSFONKSİYONUNDA KARDİYOVASKÜLER HASTALIKLAR

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### TİROİD HORMONLARI VE KARDİYOVASKÜLER SİSTEM

Tiroid hastalığı oldukça yaygındır. Mevcut veriler, yetişkin kadın nüfusunun %9-%15'inin, yetişkin erkeklerin ise daha küçük bir kısmının etkilendiğini göstermektedir(1). Tiroid hormonlarının kardiyovasküler sistem üzerine etkilerinin bilinmesi, tiroid hastalıklarının tanısının konulup tedavisinin etkin yapılmasını ve birçok kalp hastalığının kontrol altında tutulmasını sağlayacaktır.

Tiroid hastalığının bazı karakteristik belirti ve semptomlarının tiroid hormonunun kardiyovasküler sistem üzerindeki etkilerinden kaynaklandığı uzun zamandır bilinmektedir. Hem hipertiroidizm hem de hipotiroidizm kardiyak kontraktilite, miyokardiyal oksijen tüketimi, kardiyak output, kan basıncı ve sistemik vasküler dirençte (SVR) değişikliklere neden olur(2,3). Tiroid hormonunun kardiyovasküler sistem üzerindeki hücresel mekanizmalarının anlaşılmasıyla, tiroid disfonksiyonundan kaynaklanan kalp debisi, kardiyak kontraktilite, kan basıncı,

vasküler direnç ve ritim bozukluklarındaki değişiklikleri açıklamak mümkün olmuştur(4-6).

Tiroid hastalığının kardiyovasküler sistem üzerine etkilerinin olduğu bilgisi normal tiroid fonksiyonunun sağlanmasıyla çoğunlukla anormal kardiyovasküler hemodinamiği tersine çevirdiği gözlemlenmektedir. Hipertiroidizm atriyal fibrilasyona yatkınlık oluşturabilirken, hipotiroidizm ventriküler disritmiye yatkınlık oluşturabilir. Hemen hemen tüm vakalarda, altta yatan tiroid bozukluğu fark edilip tedavi edilirse bu kardiyovasküler değişiklikler düzelir.

### KARDİYOVASKÜLER HEMODİNAMİ ÜZERİNE TİROİD HORMONLARININ ETKİLERİ

Kalp ve periferik damar sistemi üzerindeki tiroid hormonu etkileri, azalmış SVR, artmış istirahat kalp hızı, artmış sol ventriküler kasılması ve artmış kan hacmiyle oluşur. Tiroid hormonu, vasküler düz kas hücrelerine doğrudan etki ederek periferik arteriyollerde direnç azalmasına ve

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İlacı bağıli hipertiroidizm tahminleri % 2-10 arasında deęişmekte ve tedavi süresine bağıli olarak doğrudan deęişkenlik göstermektedir. Başlangıçta geniş bir İtalyan hasta popülasyonunda açıklandığı gibi, amiodaronun neden olduğu 2 hipertiroidizm formu mevcuttur. Tip 1 hipertiroidizm, önceden var olan tiroid hastalığı ve guatr olan hastalarda ortaya çıkar ve iyot alımının düşük olduğu bölgelerde daha sık görülür. Tip 2 hipertiroidizm, daha önce normal bir tiroid bezinden artan tiroid hormon salınımına neden olan inflamatuvar bir süreçten kaynaklanır. Bu 2 tip arasında ayırım yapmak genellikle mümkün değildir. Yüksek eritrosit sedimantasyon hızı, yüksek interlökin-6 seviyeleri ile inflamasyon belirtileri tiroid bezi boyutunda küçük artışlar mevcut bu durumlarda izlenir(64).

Amiodaron kaynaklı hipertiroidizmi olan hastaların tedavisi zor olabilir ve uygun tedavi şekli konusunda fikir birliği yoktur. Diabetes mellituslu hastalar dışında tümünde 14-21 gün boyunca günde 20 ila 30 mg prednizon kullanan bir glukokortikoid denemesi, T4 seviyelerini hızla düşürmüştür. Protokoller amiodaronun kesilmesini ve nispeten yüksek dozlarda tiyoürelerin kullanılmasını önermektedir. Ancak bu müdahalelerin hiçbirinin öngörülebilir faydalar sağladığı gösterilememiştir(64).

Amiodaron ile tedavi edilen hastaların bir kısmı antikoagulan olarak warfarin ile tedavi görürler. Bu hastalarda amiodaronun neden olduğu hipertiroidizmin, D vitamini metabolizmasını ve klirensini arttırdığını bilmek önemlidir. Bu da terapötik warfarin dozajı gereksinimini düşürür. Bu nedenle, bu hastalarda hem hipertiroidizm döneminde hem de sonraki aylarda protrombin süreleri yakından izlenmelidir. Diğer yıkıcı tiroidit tiplerinde olduğu gibi, hipertiroidizm evresini sıklıkla bir klinik ve kimyasal hipotiroidizm dönemi izleyebilir(61,62).

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