

# OBEZİTE VE ÜROLOJİK HASTALIKLAR

## 14. BÖLÜM

Ekrem AKDENİZ<sup>1</sup>  
Muhammed Bahattin ULU<sup>2</sup>

### Giriş

Vücut ağırlığının yaklaşık %20'sini oluşturan yağ dokusunun görevi fiziksel koruma, ısı üretimi, enerji ve yağda eriyen vitaminleri depolama olarak sayılabilir. Yağ dokusunun bu temel işlevlerinin yanı sıra bir takım inflamatuvar, endokrin ve sekretuar görevleri de vardır. Yağ dokusu adipozitler, makrofajlar ve lenfositler gibi inflamatuvar hücreler barındırır (1). Yağ hücreleri otokrin, parakrin ve endokrin işlevleri olan farklı biyolojik aktif peptidler ve proteinler üretir. Bunlar yağ doku kaynaklı (leptin, adiponektin, rezistin) yapılar ve adipokinler (immün-modülatör ajanlar) olmak üzere iki gruba ayrılır (2). Artan yağ dokusu miktarıyla birlikte inflamatuvar ajanlar ve biyolojik aktif peptidler artar ve tüm vücudu etkileyen patofizyolojik değişiklikler ortaya çıkar. Ayrıca fazla miktardaki yağ dokusu vücutta bir takım anatomik değişikliklere neden olarak mekanik etkiyle vücut fonksiyonlarını etkiler. Tüm bu sebeplerden dolayı obezite pek çok sistemi etkileyerek obezite kaynaklı farklı hastalıklara yol açar. Obezite üriner sistemi de etkiler ve obezlerde üriner sistem hastalıkları görülme oranı artar.

### Obezite ve ürolojik kanserler

Kronik inflamasyon kanser gelişiminin arkasındaki en büyük nedendir. Prostattektomi materyallerinde en sık görülen histopatolojik bulgulardan biri akut veya kronik inflamasyondur. Prostatta farklı nedenlere bağlı olarak inflamasyon oluşabilir ve bu nedenlerin bir tanesi de obezitedir (3). Obezite farklı mekanizmalarla prostat dokusunda inflamasyona yol açmaktadır. Adiposit hücrelerinden

<sup>1</sup> Üroloji Uzmanı, Samsun Gazi Devlet Hastanesi, Üroloji Kliniği ekrem.akdeniz@saglik.gov.tr

<sup>2</sup> Üroloji Uzmanı, Samsun Gazi Devlet Hastanesi, Üroloji Kliniği muhammetbahaettinulu@gmail.com

nu yaparak inflamasyona neden olur. Bu nedenle prostat biyopsisi yapılan obez hastalarda biyopsiye bağlı febril komplikasyonlar daha sık görülür (54).

Benign prostat hiperplazisi nedeniyle prostatektomi yapılan obez hastalarda postoperatif dönemde daha fazla iritatif alt üriner sistem semptomları görülür. Nedeni ise obeziteye bağlı oluşan vasküler direnç nedeniyle mesane perfüzyonunun azalması ve hipoksinin artmasıdır (55). Obezite renal transplantasyon için bir kontrendikasyon değildir. Ancak obezitede akut rejeksiyon riski artarken, greft fonksiyonu ve greft ömrü azalır (56).

Kas invaze mesane tümörü nedeniyle radikal sistektomi yapılan hastalarda rekürrens ve kanser spesifik mortalite oranı obezlerde daha yüksektir. Bu kötü onkolojik sonuçların nedeni farklı sebeplere dayanır. En çok obeziteye bağlı cerrahi zorluklar nedeniyle olduğu düşünülür (57). Bunun dışında hormonal ve genetik olmak üzere iki farklı hipotez öne sürülür. Hiperinsülinemi nedeniyle IGF-1 miktarı artar, IGF-1 hücrelerde proliferasyonu ve apoptozisi indükleyerek tümör gelişimini artırır (58). Diğer hipotezde ise yağ hücrelerinden salınan sitokinler kronik inflamasyona neden olmakta, kronik inflamasyon da kanser gelişimine neden olur (59). Üriner diversiyon yapılan obez hastalarda üreteral anostomoz stenoz oranı yüksektir (60). Obez hastalarda radikal prostatektomi sonrasında daha fazla üriner inkontinans görülmektedir (61). Her iki komplikasyonun nedeni ise obeziteye bağlı yüksek karın içi basıncıdır. Ayrıca obezite malignite nedeniyle nefrektomi yapılan hastalarda azalmış glomerüler filtrasyon oranı ve yüksek kronik böbrek yetmezliği riski ile ilişkilidir (62).

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