

## OBEZİTE VE DİYABETİK KARDİYOMİYOPATİ

Uğur DALAMAN<sup>1</sup>

### Giriş

Kitabımızın bu bölümünde obezitenin tip 2 diabetes mellitus (T2DM) ile ilişkisini ve derecesini, oluşan diyabetik kardiyomiyopati (DKM) patolojisini ve bu patolojinin hücresel düzeyde neden olduğu değişiklikleri, özellikle kardiyak uyarılma-kasılma çiftlenimi çerçevesinde incelenmesi amaçlanmıştır. Bu doğrultuda bölümümüzün akış sırasını; obezite, diabetes mellitus (DM), diyabetik kardiyomiyopati, kardiyak uyarılma-kasılma çiftlenimi ve diyabetik kardiyomiyopati patolojisinin uyarılma-kasılma çiftlenimi düzleminde yaptığı değişiklikler oluşturacaktır.

Günümüzde obezite neredeyse küresel bir salgın olarak kabul edilmektedir (1). Tanımsal olarak vücut yağının aşırı miktarda birikmesi sonucunda obezitenin meydana geldiği söylenebilmektedir. Aşırı kilolu ve obez bireyler vücut kitle indeksi (BMI) adı verilen bir kriter tarafından değerlendirilerek tanılanırlar. Bu indeks bireyin vücut ağırlığının, metre cinsinden boy uzunluğu-

nun karesine oranlanmasıyla ( $\text{kg}/\text{m}^2$ ) hesaplanmaktadır. Bu indeks düzleminde değeri  $30 \text{ kg}/\text{m}^2$  üzerinde olan bireyler obez olarak adlandırılmaktadır (2). Halk sağlığı yayınları, obez bireylerde T2DM, kalp hastalığı ve yüksek tansiyon risklerinin arttığını göstermektedir (3). Obezite ve diyabet arasındaki ilişki Elliot P. Joslin tarafından 1916 gibi erken bir tarihte fark edilmiştir (4). Kişi günlük yaşantısı için gerekenden daha fazla enerji aldığı anda, fazla enerji yağ olarak depolanmaktadır. Bu döngünün sürekli devam etmesi sonucunda artan yağ kütlesi obezitenin evrilmesine neden olmaktadır. Bununla birlikte DM tanısı konmuş obez bireylerde %10'luk bir kilo kaybının sonucunda diyabetin klinik belirtilerinin ortadan kaybolduğu bulgusuna ulaşılmıştır (4). Bu gözlem, obezitenin T2DM'ye neden olduğu inancını desteklemektedir (5). Çocukluk çağındaki şiddetli obezitenin gençlerde ve erken yetişkinlikte T2DM riskini artırdığı kaydedilmiştir (6). Kahn ve Porten'in 1990'ların başında yaptığı bir başka gözlem ise, T2DM teşhisi konan bireylerin %80'inden fazlasının obez olduğu, ancak obez kişilerin %85'inin

<sup>1</sup> Dr., Akdeniz Üniversitesi Tıp Fakültesi Biyofizik Anabilim Dalı, udalaman@gmail.com

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