

## BÖLÜM 2

# DIYABETES MELLİTUS VE ERKEK İNFERTİLİTE İLİŞKİSİ

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### GİRİŞ

Diyabetes mellitus (DM), pankreas beta ( $\beta$ ) hücresi disfonksiyonu nedeniyle oluşan mutlak/göreceli insülin eksikliği ve/veya insülin direncine bağlı hiperglisemi ile karakterize, sıklıkla metabolik sendrom özellikleriyle birlikte görülen yaygın ve kronik bir metabolik hastalıktır (1). Diyabette görülen kronik hiperglisemi özellikle gözler, böbrekler, sinirler, kalp ve kan damarları olmak üzere farklı organların uzun vadede hasarı, işlev bozukluğu ve yetmezliği ile ilişkilidir (2). Diyabet, tip 1 diyabet (T1DM), tip 2 diyabet (T2DM), gestasyonel diyabet (GDM) ve spesifik nedenlere bağlı gelişen diyabet (yenidoğan diyabeti, kistik fibrozis veya pankreatite bağlı gelişen gibi) olarak 4'e ayrılır (3). DM'nin yaygınlığı giderek artmakta olup, batı yaşam tarzlarını benimseyen Çin ve Hindistan gibi ülkelerde nüfusun %10'una kadar çıkmaktadır. Dahası, 2017'de yaklaşık 60 milyon yetişkin Avrupalının T2DM'ye sahip olduğu, yarısının ise henüz teşhis edilmediği düşünülmektedir (4). Uluslararası Diyabet Federasyonu, dünya çapında DM ile yaşayan 536 milyondan fazla insan olduğunu ve bunların büyük çoğunluğunun T2DM'li olduğunu ayrıca bu sayının 2045 yılında 700 milyonu geçeceğini tahmin etmektedir (5).

İnfertilite (kısırlık), 12 ay boyunca düzenli ve haftada en az 2 kez korunmasız ilişkiye girdikten sonra gebe kalamama olarak tanımlanır ve Dünya Sağlık Örgütü tarafından bir halk sağlığı sorunu olarak kabul edilmiştir (6, 7). Erkek infertilitesi, erkek partnerdeki anormal sperm parametrelerinden kaynaklanır ve tüm

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