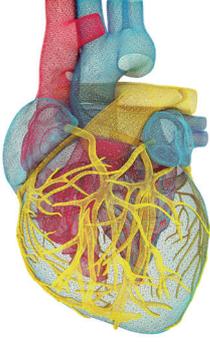


# BÖLÜM 20



## Kalp Yetersizliği Tedavisinde Kullanılan Ajanlar

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### | GİRİŞ

Kalp yetersizliği (KY), yüksek jügul venöz basınç, pulmoner ral ve periferik ödem gibi belirtilerin eşlik edebileceği, nefes darlığı ve yorgunluk gibi semptomlardan oluşan bir klinik sendromdur. Dinlenme veya egzersiz sırasında intrakardiyak basınçların yükselmesi ya da yetersiz kardiyak output ile sonuçlanan kalbin yapısal veya fonksiyonel anormallığı kalp yetersizliğine neden olmaktadır. Kalp yetersizliğine miyokard, perikard ve endokard hastalıkları, kalp kapakçıkları, damar hastalıkları veya metabolik bozukluklar neden olabilir (1).

KY tedavisinin hedefi morbiditeyi (yani şikayetleri azaltmak, sağlıkla ilgili hayat kalitesini ve fonksiyonel kapasitesini iyileştirmek ve hospitalizasyon oranını indirmek) ve mortaliteyi azaltmaktır.

Kalp yetersizliği; sol ventrikül ejeksiyon fraksiyonuna (SVEF) göre Tablo 1'deki gibi sınıflandırılmaktadır.

### Düşük Ejeksiyon Fraksiyonlu Kalp Yetersizliği Tedavisinde Kullanılan Ajanlar

DEF-KY tedavisinde, Avrupa Kardiyoloji Derneği'nin 2021 KY kılavuzunda Sınıf I öneri olarak 5 ilaç grubu bulunmaktadır. Bunlar; anjiyotensin dönüştürücü enzim (ACE) inhibitörleri ve anjiyotensin reseptör-neprisilin inhibitörü (ARNİ) (bu ilaçlara karşı intolerans varlığında anjiyotensin reseptör blokleri [ARB]), beta blokerler, mineralokortikoid reseptör antagonistleri, sodyum-glukoz ko-transporter 2 inhibitörleri ve hipervolemi ilişkili semptomlar varsa diüretiklerdir.

**Tablo 1.** Kalp yetersizliği sınıflandırılması

Düşük ejeksiyon fraksiyonlu KY (DEF-KY)	SVEF ≤ %40
Hafif azalmış ejeksiyon fraksiyonlu KY (HEF-KY)	SVEF= %41-49
Korunmuş ejeksiyon fraksiyonlu KY (KEF-KY)	SVEF ≥ % 50

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hastalığı, hiperlipidemi, obezite, anemi, diabetes mellitus, kronik böbrek hastalığı ve uykuda solum bozukluğu yer almaktadır (51).

KEF-KY'si ve volüm yüklenmesi olan hastalarda, diğer farmakolojik tedavilere başlanmadan önce ilk diüretik tedavi verilmelidir. Bu durumda ilk loop diüretikler tercih edilmelidir.

New York Kalp Cemiyeti (NYHA) sınıf II ve III semptomları olan ve yüksek B tipi natriüretik peptid (BNP) veya N-terminal pro-BNP (NT-proBNP) seviyesi olan KEF-KY'li hastalara hem SGLT-2i hem de MRA ile tedavi önerilmektedir. Önce SGLT-2i başlanır ve ardından hasta ilk tedaviyi tolere ederse iki hafta sonra MRA eklenir. Başlangıç tedavisine yanıt olarak KY semptomları düzeler ve/veya BNP azalır, MRA başlanmayabilir. MRA'lar KEF-KY'li hastalarda hastaneye yatışı azaltmaktadır ancak mortalite üzerine etkileri gösterilememiştir. MRA'lar ile ilgili bu durumu destekleyen kanıtlar TOPCAT çalışmasının alt grup analizlerinden gelmektedir (52). SGLT-2i'ler ise KEF-KY'li hastaların KY nedeniyle hastaneye yatışını azaltmaktadır ayrıca bu ilaçların KEF-KY'li hastaların kardiyovasküler ölüm riskini azalttığına da dair bazı çalışmalar çıkmıştır. EMPEROR-preserved çalışmasında empagliflozinin KEF-KY'li hastalarda hastaneye yatış ihtiyacını azalttığı gösterilmiştir (53). DELIVER çalışmasında ise dapagliflozinin, KEF-KY'li hastalarda KY'nin kötüleşmesini ve kardiyovasküler ölüm riskini azalttığı gösterilmiştir (54).

## SONUÇ

Kalp yetersizliğinde tedavi başarısı, yeni tedavi ajanlarının eklenmesi ile artmaktadır. DEF-KY tedavisinde; beta blokerler, RAS inhibitörleri, SGLT-2 inhibitörleri ve MRA kombinasyonundan oluşan dördü tedavi standart tedavi rejimi haline gelmiştir. HEF-KY tedavisi de DEF-KY tedavisine benzerlik göstermektedir. KEF-KY tedavisinde de MRA ve SGLT-2'lerin etkili olduğuna dair veriler mevcuttur. SGLT-2 inhibitörleri diyabet tedavisi olarak ortaya çıkmış olsa da, bütün KY tiplerinin tedavisinde kullanılabilir bir ilaç grubudur.

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