

# GERİATRİ VE HEPATORENAL SENDROM

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## GİRİŞ

Yaşlanma ile birçok organ ve sistemde yapısal ve fonksiyonel değişiklikler görülür. Böbreklerde yaşlanma sonucu nefron sayısında azalma(1-3), nefroskleroz (2, 4, 5) nefronlarda yer yer kompansatuvar hipertrofi (6, 7), glomeruloskleroz(2, 5, 8-11), böbrek boyutlarında küçülme(12, 13) ile birlikte glomerüler filtrasyon hızında (GFR) azalma meydana gelir (14-16). Yaşlanma sonucu renal sistemde meydana gelen bu tür değişimler ve fonksiyonel rezervin azalması geriatrik hastaları böbrek hasarına (17, 18) ve dekompanse siroz ve/ veya akut karaciğer yetmezliği olan hastalardaki fonksiyonel dolaşım bozukluğuna bağlı olarak gelişebilen hepatorenal sendroma daha duyarlı hale getirmektedir.

## EPİDEMİYOLOJİ

Çalışmalara bakıldığından; sirozu ve asidi olan non-azotemik 229 hastanın alındığı prospектив bir çalışmada hepatorenal sendrom insidansı sırasıyla 1 ve 5 yılda %18 ve %39 olarak saptanmıştır(19). Özellikle hiponatremi ve yüksek plazma renin aktivitesi gibi nörohümoral aktivasyon

belirtisi olan hastaların renal perfüzyonda ciddi bir azalma ve dolayısıyla hepatorenal sendrom açısından daha yüksek risk altında olduğu görülmüştür(20, 21). Akut karaciğer hastalığı olan hastalarda da hepatorenal sendrom sıkılıkla görülebilir. Örneğin alkolik hepatitli hastalarda yapılan bir çalışmada 101 hastanın 28'inde hepatorenal sendrom geliştiği gözlenmiştir (22). Hepatorenal sendrom şiddetli karaciğer hastalıklarının çoğu formunda görülebilse de primer biliyer kolanjiti olan hastalarda muhtemelen safra tuzlarının natriüretik ve renal vazodilatör etkilerinden dolayı daha az sıkılıkla ortaya çıkma eğilimindedir(23).

## TANIM

Hepatorenal sendrom akut ve/veya kronik karaciğer hastalığı olan bireylerde akut böbrek hasarına yol açabilen birçok sebepten bir tanesidir ve şiddetli karaciğer hasarının neden olduğu renal perfüzyondaki azalmaya bağlı olarak gelişmektedir. Hepatorenal sendrom gelişen hastaların çögünülgünde alta portal hipertansiyona yol açan siroz, şiddetli alkolik hepatit, herhangi bir nedene bağlı akut karaciğer yetmezliği ve nadiren karaciğerin metastatik tümörleri yer alır(20, 24).

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tedir. Karaciğer nakli yapılan hepatorenal sendromlu hastaların yaklaşık %75'inde renal fonksiyonlarda düzelleme gözlenmektedir(92, 93). Nakil sonrası renal fonksiyonların iyileşmemesinde en güçlü gösterge nakil öncesi diyaliz süresi olup diyaliz yapılan her gün için risk %6 oranında artmaktadır(94). Nakil sonrası renal fonksiyonların iyileşmemesi ile ilgili diğer faktörler ileri yaş, yüksek basal serum kreatinin, nakil sırasında uzamış iskemi, nefrotoksik ajanlara maruziyet, altta yatan diyabet ve akut tüberler nekrozdur (92, 95). Karaciğer nakli yapılan hepatorenal sendromlu hastaların %6-10'unda nakilden sonraki 1 yıl içinde son dönem böbrek yetmezliği gelişmektedir (92, 94) ki bu nedenle nakil sonrası renal iyileşme olasılığı düşünülmeli, gerekirse eş zamanlı karaciğer-böbrek nakli seçenekler arasında olmalıdır. Eş zamanlı karaciğer ve böbrek nakli için ana endikasyonlar renal replasman tedavisi gerektiren veya 4-6 haftadan daha uzun süreli GFR <25ml/dk olan akut böbrek yetmezliği ile nakil sırasında iken GFR<30ml/dk veya 90 günden daha uzun süre GFR<60 ml/dk olan kronik böbrek yetmezliğidir (91, 94).

## HEPATORENAL SENDROM GELİŞİMİNİ ÖNLEME

Hepatorenal sendrom bakteriyel enfeksiyonlar (örn spontan bakteriyel peritonit), şiddetli alkolik hepatit gibi durumlarda sıkılıkla ortaya çıkmaktadır. Alkolik hepatit tedavisinin etkili bir şekilde yapılması, spontan bakteriyel peritonit geçiren hastalarda enfeksiyonun etkili tedavisi ve albümün replasmanı, spontan bakteriyel peritonit geçirmiş olan hastalarda antibiyotik profilaksi (örn norfloksasin) hepatorenal sendrom gelişimiini önleyebilir (96).

## PROGNOZ

Hepatorenal sendromda прогноз medikal tedavinin zamanında ve etkili yapılması, yetersiz kalınan durumlarda karaciğer nakli veya eş zamanlı

karaciğer böbrek nakline bağlı olarak vaka bazında değişmekte birlikte önemli ölçüde kötüdür (97). Tedavi almayan hastalar çoğunlukla renal fonksiyon bozukluğunun başlamasından sonraki haftalar içinde hayatını kaybederler (98).

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