BÖLÜM 7

ÖDEM VE ASİT

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ÖDEM

Ödem, interstisyel sıvı hacminin anormal bir genişlemesi sonucu oluşan intraselüler dokuda anormal sıvı birikmesidir. Bu sıvı interstisyel ve intravasküler bölgeler arasında kapiller boyunca onkotik basınç gradiyenti ve kapiller hidrostatik basınç tarafından düzenlenir (1,2,3). Artmış kapiller hidrostatik basınç (örnek sağ kalp yetmezliği), artmış plazma volümü, azalmış plazma onkotik basınç-hipoalbüminemi (örnek nefrotik sendrom), artmış kapiller permeabilite (örnek alerjik Quinke ödemi) veya lenfatik obstrüksiyon sonucu lokal veya sistemik sıvı birikmesi meydan gelir (Tablo 1-2). Ödem oluşumundan bu mekanizmalardan biri veya birkaçı sorumlu olabilir. Alt ekstremitelerde sıvı birikimin görünür hale gelmesi için vücutta 3-5 litre fazla sıvı birikmesi gerekmektedir. Buna gizli ödem denir.

Tablo 1. Ödemin sistemik nedenleri

Neden	**Mekanizma**
Allerjik reaksiyon, ürtiker, anjiödem	Artmış kapiller permeabilite
Kardiyak hastalıklar	Sistemik venöz hipertansiyondan artmış kapiller permeabilite; artmış plazma volüm
Karaciğer hastalıkları	Sistemik venöz hipertansiyondan artmış kapiller permeabilite; protein sentezi azalmasından azalmış plazma onkotik basınç
Malabsorbsiyon	Azalmış protein sentezinin yol açtığı azalmış plazma onkotik basınç

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nun neden olduğu asitte %80–%100 doğruluğundadır (54). Hem kardiyak hem de hepatik etiyolojiler portal hipertansiyon yoluyla aside neden olur, SAAG her iki durumda da >1,1 g/dL'dır. Her iki etyolik durumda da asit total protein incelemesi yapılmalıdır. Kardiyak asitte total protein genellikle ≥2,5 g/dL'dir (55). Ekokardiyografi ile kesinlikle kalp fonksiyonu ve ejeksiyon fraksiyonu değerlendirme yapılmalıdır (56,57)

Serum NT-proBNP, klinik pratikte kullanılan kalp yetmezliği biyomarker olarak tanımlanır (58). Üst sınır akut durumlar için 300 pg/mL ve akut olmayan durumlar için 125 pg/mL'dir. NT-proBNP kalp yetmezliği için pozitif prediktif değer 0,44–0,67 negatif prediktif değer 0,94–0,98'dir (59). Bazı araştırmalar NT-proBNP kılavuzluğunda tedavinin özellikle tüm nedenlere bağlı mortalite ve kardiyovasküler hastaneye yatış daha iyi hasta sonuçları ile olduğunu bulmuştur (60,61,62). Bu yaklaşımın önemli bir dezavantajı, seri serum NT-proBNP araştırmaların maliyetidir.

Özet olarak; çok nadir olmakla asitli hastalarda altta yatan kalp yetmezliği olabilir. Peritoneal sıvı analizleri kardiyak asiti desteklemelidir (SAAG>1,1 g/dL, asit proteini≥2,5 g/dL). Ekokardiyografik değerlendirme yapılmalı (kalp yetmezliği, konstrüktif perikardit, restriktif kardiyomiyopati, tricüspit hastalıkları değerlendirme gibi), NT-proBNP değerleri tanı ve tedavide izlem için değerlendirilmelidir. Diüretik tedavi hemen başlanmalı, kalp yetmezliği tedavisi sıklıkla asiti dramatik olarak geriletmektedir.

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