25.
BÖLÜM

ANEVRİZMALARDA HAYVAN MODELLERİ

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Anevrizma, vasküler yapıların tüm tabakalarının katıldığı normal çapa göre %50 veya daha fazla fokal genişleme olarak tanımlanmıştır. Etyopatogenezinde histolojik olarak oksidatif stres, kronik inflamasyon ve ekstraselüler matriks degradasyonu vardır (1). Aort anevrizmaları, tedavisi zor bir patoloji olarak günlük hayatta karşımıza çıkmaktadır. En sık abdominal aortta karşılaşılan bu hastalığın yaş ortalaması yüksek olan gelişmiş toplumlarda prevalansı %10'lara kadar yükselmektedir (1, 2). 2018 yılında Amerika Birleşik Devletleri'nde yaklaşık 10,700 kişi kranial anevrizmalar dışındaki anevrizmal hastalıklar sebebi ile hayatını kaybetmiştir (3). 50 yaş üstünde erkeklerde %3,9 ila %7,2, kadınlarda ise %1 ila %1,3 arasında gözlenmektedir (4, 5). Sıklıkla asemptomatik olan bu hastalar, nadiren de olsa lokal basıya bağlı bölgesel veya organ basısına bağlı sistemik semptomlar ile başvurabilir. Anevrizma hastaları ülkemizdeki gibi toplum taraması yapılmayan ülkelerde genellikle başka bir sebeple yapılan tetkikler sonucunda insidental olarak saptanırlar. Hastalığın doğal seyri ilerleyici genişleme ve rüptür şeklindedir. Bunun dışında zamanında ve uygun şekilde tedavi edilmemiş hastalarda diseksiyon, embolizm ve tromboz gibi yüksek morbidite ve mortalitesi olan komplikasyonlara sebep olabilir. Rüptüre olmuş anevrizma hastalarında mortalite oranı herhangi bir tedavi uygulanmaması durumunda %100'dür (1).

Aort anevrizmalarının etyopatogenezi tam olarak bilinmemekle birlikte anevrizmal damar duvarının media ve adventisya tabakasında elastin ve kollajen kaybı, vasküler düz kas hücre yapısında incelme ve zayıflama ve lenfosit ve makrofajların transmural infiltrasyonu mevcuttur. Hastalarda bilinen baş-

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Tablo 17: Sık kullanılan anevrizma modellerinin dağılımı. Poulsen ve arkadaşları*19* tarafından 2014 yılına kadar yapılmış olan çalışmaların değerlendirildiği sistematik review sonucunda yapılan tablonun modifiye edilmesi ile oluşturulmuştur.

Model	Fare	Rat	Tavşan	Köpek	Koyun	Domuz
Elastaz modeli	40	90	9			
Anj II infüzyonu ve hiperkolestrolemik model kombinasyonu (ApoE-/-)	133					
Kalsiyum klorid modeli	29	12	4			
Anj II infüzyonu ve transgenik model kombinasyonu	41					
Elastaz ve transgenik model kombinasyonu	35					
Yama modeli				20	6	15
Graft modeli				16	2	3
Xenograft modeli		21				
Kalsiyum klorid ve transgenik model kombinasyonu	20					
Allograft modeli	2	10				
AnjII infüzyonu ve hiperkolestrolemik model kombinasyonu (LDLR-/-)	12					
AnjII infüzyon modeli	8					
Kese modeli		2	3	2		1
Oversizedstent modeli				5	2	
Elastaz ve stenotik kombine model			2			1

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