

AKNE VULGARİSTE DENEYSSEL HAYVAN MODELLERİ

36 BÖLÜM

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GİRİŞ

Akne vulgaris (AV), pilosebase ünitenin kronik inflamatuvar ve kendini sınırlayan bir hastalığıdır. Tipik olarak adolesan dönemde görülen AV, sebace bezlerin yoğun olarak bulunduğu yüz, sırt, göğüs ve omuz bölgelerini etkilemektedir. Akne hastaları klinikte açık ve kapalı komedonlar, papüller, püstüller ve daha az sıklıkta nodül ve kistlerden oluşan pleomorfik bir lezyon grubuyla karşımıza çıkmaktadır. Papüler ve püstüler lezyonlar skar oluşumuna sebep olabilirler ki bu durum kozmetik olarak rahatsızlık vericidir ve çoğunlukla bireyin psikolojisini olumsuz etkileyebilir(1,2).

AKNE VULGARİS EPİDEMİYOLOJİ

Akne vulgaris, sıklıkla ergenlik dönemi ve genç erişkinlerde görülmekle birlikte hayatın diğer tüm dönemlerinde de görülebilen bir hastalıktır(3). Bazı çalışmalarda gelişmemiş ülkelerde prevalansın daha az olduğu, batı toplumlarında sıklığının %87'e kadar görüldüğü ve bunun endüstri ile ilişkili olduğu bulunmuştur(4). Sıklığı 12-24 yaşları arasında yaklaşık %85, tüm yaş grupları için ise yaklaşık %15 kadardır ve hastaların %8'inde lezyonlar 25 yaş üzerinde devam ettiği bilinmektedir(5). En şiddetli olduğu yaş

grubu kızlarda 14-17, erkeklerde 16-19 yaşları olduğu bildirilmiş olup bu durum ergenlik süreciyle yakın ilişkisini ortaya koymaktadır(6). Ülkemizde yapılan çalışmalarda %20-60 arasında değişen prevalans bildirimleri yapılmıştır(7).

AKNE VULGARİSTE ETYOPATOGENEZ

Pilosebase ünite; sebace glandlar, kıl folikülü ve erekteör pili kasından oluşur. Bazen bu yapıya apokrin ter bezi de dahil olabilir(8). Folliküldeki epitel yenilenerek sebum ile deri yüzeyine salınır, sebace bezler kıl folikülünün üst kısmında bulunurlar ve kıl döngüsünden etkilenmezler(9).

Pilosebase ünite de gelişen kronik enflamasyonla karakterize olan akne vulgaris bu sebace bezlerin yoğunlukta olduğu yüz, sırt ve göğüs bölgelerinde daha sık görülmektedir. Sebace bezler ayak tabanı ve ayak sırtı dışında vücudun hemen hemen her yerinde görülmesine rağmen boyut ve yoğunlukları değişiklik gösterdiği için belli bölgelerde daha sık görülmektedir.

AV etyopatogenezi multifaktöriyeldir ve beslenmeden, genetik yatkınlığa kadar geniş bir spektrumda pilosebase üniteyi etkileyen birçok faktör AV etyopatogenizinde rol oynamaktadır. AV gelişimine neden olan patofizyolojik faktörler dört temel başlık altında toplanmaktadır(10).

4. Meksika Tüysüz Köpek Modeli:

Meksika tüysüz köpeğin derisi komedonlarla kaplıdır ve bu nedenle bu hayvan topikal anti-akne ilaçlarının komedyolitik aktivitesini değerlendirmek için potansiyel olarak yararlı bir modeldir(111).

Tüysüz köpeklerin derisindeki spontan komedonlar, insan akne vulgarisine makroskopik ve histolojik olarak benzemekte olup komedonlar daha çok sırt bölgesine yerleşmiştir(112).

Ancak insan aknegenezini diğer hayvan modellerine göre tam olarak taklit edememesi nedeniyle son yıllarda tercih edilmemektedir.

Sonuç

Yeni antiakne ilaçların ve kozmetik ürünlerin farmakolojik özelliklerinin ve yan etkilerinin değerlendirilmesi açısından test edilmesinde sıklıkla kullanılan hayvan modellerinin bazı kısıtlayıcı faktörleri vardır. Bunların en başında hayvan modellerinin insanlar ile tamamen homolog olmaması gelmektedir. Çünkü hayvan derisi ile insan derisinin histolojisi, metabolizması ve permeabilitesi doğal farklılıklar göstermektedir. Bu da hayvan modellerinin insandaki klinik tablo ile ilişkilendirilmesini kısıtlamaktadır. Tüm bu kısıtlamalara rağmen son zamanlarda, akne için hayvan modellerinin tanımlanmasında ve kullanımında dikkate değer bir ilerleme kaydedilmiştir. Yapılacak yeni çalışmalarla ideal akne hayvan modellerinin geliştirileceğini ummaktayız.

Anahtar Kelimeler: Akne vulgaris, Rhino fare modeli, inflamatuvar akne modelleri, REA, Meksika tüysüz köpek modeli

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