

İlke KARAYEL HACIOĞLU¹**GENEL BİLGİLER**

Daha önce *Reoviridae* olarak bilinen virus ailesi, Uluslararası Virus Taksonomisi Komitesinin (ICTV) güncellenmiş raporuna göre Reovirales takımı olarak tanımlanmıştır. Eski *Reoviridae* ailesine ait alt aileler olan *Sedoreovirinae* ve *Spinareovirinae*, bu yeni sınıflandırmada ayrı aileler olarak tanımlanmış ve sırasıyla *Sedoreoviridae* ve *Spinareoviridae* olarak adlandırılmıştır. Bu bölüm, güncellenmiş sınıflandırmaya uygun olarak düzenlenmiş olup, *Sedoreoviridae* ailesine ait virus hastalıklarını kapsamaktadır.

Sedoreoviridae ailesi, memeliler, kuşlar, kabuklular, eklembacaklılar, algler ve bitkiler de dahil olmak üzere çeşitli konakçıları enfekte eden çok sayıda virus türünü içermektedir. Bu ailede yer alan virusların bir kısmı ağır hastalık tablosuna yol açmanın yanı sıra dünya çapında hayvancılık endüstrisinde önemli ekonomik kayıplara da neden olmaktadır.

Sedoreoviridae ailesindeki viruslar zarfsızdır ve ikozahedral simetriye sahiptir. Genomları, lineer çift zincirli RNA'dan (dsRNA) oluşan 10-12 segment içerir. Virionlar, 60-100 nm çapında olup, iki veya üç ayrı kapsid katmanına sahiptir. En içteki kapsid katmanı dsRNA segmentlerini ve RNA sentezi için enzimleri çevreler. Viral replikasyon sitoplazmada gerçekleşir. Viral genomun segmentli olması nedeniyle, farklı virusların hücrelerde eş zamanlı enfeksiyonu, reassortment oluşumuna neden olabilmektedir. Bu ailede reassortment sıklıkla meydana gelebilmektedir ve bu genetik çeşitliliğin önemli bir kaynağıdır.

Sedoreoviridae ailesinin içerisinde yedi cins yer almaktadır: *Cardoreovirus*, *Crabreovirus*, *Mimoreovirus*, *Orbivirus*, *Phytoreovirus*, *Rotavirus* ve *Seadornavirus*. *Orbivirus*, *Rotavirus* ve *Seadornavirus* cinslerindeki viruslar, insanlar ve çeşitli hayvan türleri için önemli patojenlerdir.

Orbivirus cinsine ait viruslar, genellikle eklembacaklı vektörler (*Culicoides* cinsi sokucu sineklerin belirli türleri, sivrisinekler, karasinekler, tatarcıklar ve keneler) aracılığıyla bulaştığı için "arbovirus" (artropod-borne virus) olarak tanımlanmaktadır. Orbivirusların sirkülasyonu için hem eklembacaklı vektörlerde hem de hayvan konakçılarında çoğalmaları gerekmektedir. Bu biyolojik vektörler, virus türüne göre değişiklik göstermektedir. Bu nedenle virusların küresel ve mevsimsel dağılımı, biyolojik vektörlerin yayılımı ve iklim koşullarıyla doğrudan ilişkilidir. *Orbivirus* cinsi, çeşitli memelileri ve böcekleri enfekte eden en az 22 virus türü içermektedir. Her bir virusun farklı sayıda serotipi bulunmaktadır. Örneğin mavidil virusu en az 27, at vebası virusu 9, epizootik hemorajik hastalık virusu 7 (ek olarak en az iki serotip önerilmiştir) serotipe sahiptir. Mavidil, at vebası ve epizootik hemorajik hastalık virusları, ekonomik açıdan önemli orbiviruslardır. Son yıllarda Mavidil'in Kuzey Afrika'dan Güney, Orta ve Kuzey Avrupa'ya yayılması ve EHDV'nin 2022'de Avrupa'da ilk kez tespit edilmesi, iklim değişikliği, vektör habitat uygunluğu, hayvan popülasyonu yoğunluğu, dağılımı ve hareketinin hastalık modelini nasıl değiştirdiğine dair bir örnek teşkil etmektedir.

¹ Doç. Dr., Ankara Üniversitesi, Veteriner Fakültesi, Viroloji AD., ilkekarayel@gmail.com, ORCID iD: 0000-0003-1566-630X

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