

# BÖLÜM 10

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## KIRIM KONGO KANAMALI ATEŞİ

Nurcan ARIKAN<sup>1</sup>

### Giriş

Kırım Kongo Kanamalı Ateşi (KKKA), kenelerle bulaşan, ateş ve kanamalarla karakterize zoonotik bir enfeksiyon hastalığıdır. KKKA virüsü pek çok hayvani enfekte edebilse de insanlar hastalık geliştiren bilinen tek konakçıdır (1). Hastalığın etkeni *Bunyaviridae* ailesinin *Nairovirus* cinsinde yer alan, tek sarmallı, zarflı RNA virüsüdür. Virüs 5-7 nm kalınlıkta zarf ile çevrilidir. Zarf üzerinde virüs tarafından kodlanan 8-10 nm uzunluğunda glikoprotein çıktıları bulunur. Ayrıca 3 segmentli ve negatif polariteli tek iplikçikli RNA genomuna sahiptir ve genomu mutasyonlara yüksek oranda açıktır (2). Şekil 1' de virüsün yapısı gösterilmiştir. KKKA virüsü, vaka ölüm oranı % 10-40 arasında değişen ciddi viral hemorajik ateş salgılarına sebep olur (3).

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## KAYNAKÇA

1. Whitehouse CA. Crimean-Congo hemorrhagic fever. *Antiviral Res* 2004; 64:145.
2. Anagnostou V, Papa A. Evolution of Crimean-Congo Hemorrhagic Fever virus. *Infect Genet Evol*. 2009;9:948–954.
3. <https://www.who.int/news-room/fact-sheets/detail/crimean-congo-haemorrhagic-fever>
4. Ergonul O: Crimean-Congo haemorrhagic fever, *Lancet Infect Dis* 2006;6(4):203-14.
5. Mertens M, Schmidt K, Ozkul A, Groschup MH. The impact of Crimean-Congo hemorrhagic fever virus on public health. *Antiviral Res* 2013; 98:248.
6. Maltezou HC, Papa A. Crimean-Congo hemorrhagic fever: risk for emergence of new endemic foci in Europe? *Travel Med Infect Dis* 2010; 8:139.
7. Yilmaz GR, Buzgan T, Irmak H, et al. The epidemiology of Crimean-Congo hemorrhagic fever in Turkey, 2002-2007. *Int J Infect Dis* 2009; 13:380.
8. Aker S, Akinci H, Kiliçoglu C, Leblebicioglu H. The geographic distribution of cases of Crimean-Congo hemorrhagic fever: Kastamonu, Turkey. *Ticks Tick Borne Dis* 2015; 6:730.
9. Bakir M, Ugurlu M, Dokuzoguz B, et al. Crimean-Congo haemorrhagic fever outbreak in Middle Anatolia: a multicentre study of clinical features and outcome measures. *J Med Microbiol* 2005; 54:385.
10. Koksal I, Yilmaz G, Aksoy F, et al. The seroprevalance of Crimean-Congo haemorrhagic fever in people living in the same environment with Crimean-Congo haemorrhagic fever patients in an endemic region in Turkey. *Epidemiol Infect* 2014; 142:239.
11. Akinci E, Bodur H, Leblebicioglu H. Pathogenesis of crimean-congo hemorrhagic Fever: Vector Borne Zoo- 19 Ş.E. Gök, Kırımkongo Kanamalı Ateşi notic Dis 2013;13(7):429-37. <http://dx.doi.org/10.1089/vbz.2012.1061>
12. Ergonul O, Tuncbilek S, Baykam N et al. Evaluation of serum levels of interleukin (IL)-6, IL-10, and tumor necrosis factor-alpha in patients with Crimean-Congo hemorrhagic fever. *J Infect Dis* 2006;193(7):941-4. <http://dx.doi.org/10.1086/500836>
13. Tasdelen Fisgin N, Fisgin T, Tanyel E et al: Crimean-Congo hemorrhagic fever: five patients with hemophagocytic syndrome, *Am J Hematol* 2008;83(1):73-6.
14. Catagatay A, Kapmaz M, Karadeniz A et al: Hemophagocytosis in a patient with Crimean Congo haemorrhagic fever, *J Med Microbiol* 2007;56(Pt 8):1126-8.
15. Gök Ş.E. Kırımkongo Kanamalı Ateşi. Okmeydanı Tıp Dergisi 32(Ek sayı):13-19, 2016 doi:10.5222/otd.2016.013
16. Mardani M, Keshtkar-Jahromi M. Crimean-Congo hemorrhagic fever. *Arch Iran Med* 2007; 10:204.
17. Onguru P, Dagdas S, Bodur H, et al. Coagulopathy parameters in patients with Crimean-Congo hemorrhagic fever and its relation with mortality. *J Clin Lab Anal* 2010; 24:163.
18. Barut, S., Dincer, F., Sahin, I., Ozyurt, H., Akkus, M., & Erkorkmaz, U. (2010). Increased serum ferritin levels in patients with Crimean-Congo hemorrhagic fever: can it be a new severity criterion? *International journal of infectious diseases*, 14(1), e50-e54.
19. Swanepoel R, Gill DE, Shepherd AJ, Leman PA, Mynhardt JH, Harvey S: The clinical pathology of Crimean-Congo hemorrhagic fever, *Rev Infect Dis* 1989;11(Suppl 4):S794-800.
20. Tülek N. Kırımkongo Kanamalı Ateşi: Tanı ve Tedavi Türkiye Klinikleri J Inf Dis-Special 26 Topics 2014;7(2)

21. Erbay A. Crimean-Congo Hemorrhagic Fever Virus' in 'Manual of Security Sensitive Microbes and Toxins', Edited by Dongyou Liu, published by CRC Press. Chapter5, pages 37-52.
22. Burt FJ, Leman PA, Abbott JC, Swanepoel R: Serodiagnosis of Crimean-Congo haemorrhagic fever, *Epidemiol Infect* 1994;113(3):551-62.
23. Ozbey SB, Kader Ç, Erbay A et al. Vector Borne Zoonotic Dis. Early use of ribavirin is beneficial in CrimeanCongo hemorrhagic fever. *Vector Borne Zoonotic Dis* 2014;14(4):300-2.
24. B. Sharifi-Mood, Alavi-Naini, M. Metanat, M. Mohammadi, A. Shakeri, A. Amjadi Efficacy of high-dose methylprednisolone in patients with Crimean-Congo haemorrhagic fever and severe thrombocytopenia *Trop Doct*, 43 (2) (2013), pp. 49-53
25. Tarantola A, Ergonul O, Tattevin P: Estimates and Prevention of Crimean Congo hemorrhagic fever risks for health care workers, "Ergonul O, Whitehouse CA (eds): Crimean-Congo Hemorrhagic Fever: A Global Perspective" kitabında s.281-94, Springer, Dordrecht (2007)
26. Whitehouse CA: Risk groups and control measures for Crimean Congo hemorrhagic fever, "Ergonul O, Whitehouse CA (eds): CrimeanCongo Hemorrhagic Fever: A Global Perspective" kitabında s.273-80, Springer, Dordrecht (2007).
27. Gozel MG, Dokmetas I, Oztop AY, et al. Recommended precaution procedures protect healthcare workers from Crimean-Congo hemorrhagic fever virus. *Int J Infect Dis* 2013; 17:e1046.
28. Centers for Disease Control and Prevention (CDC). Update: management of patients with suspected viral hemorrhagic fever--United States. *MMWR Morb Mortal Wkly Rep* 1995; 44:475.