

Kırım Kongo Kanamalı Ateş

Prof. Dr. Aynur Engin

Sivas Cumhuriyet Üniversitesi Tıp Fakültesi,
Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji AD

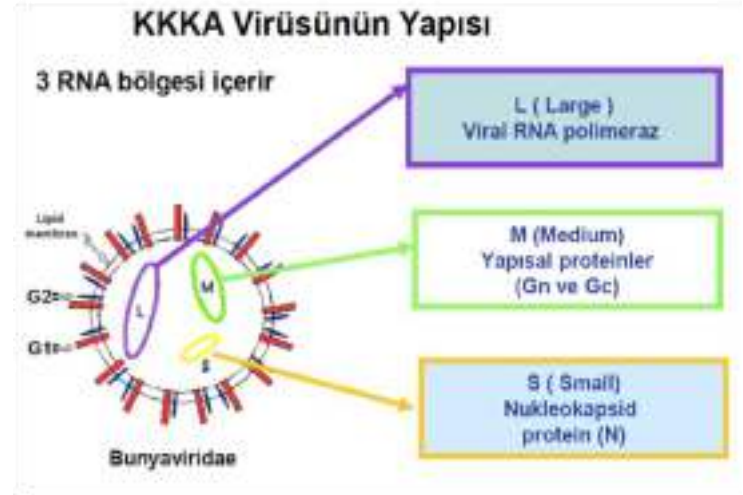
KKKA

- Etken KENE deęil VIRÜS!
- Kene bulařmada önemli ama her kene KKKA virüsünü tařımaz
- Kene ile sadece KKKA bulařmaz



KKKA etken

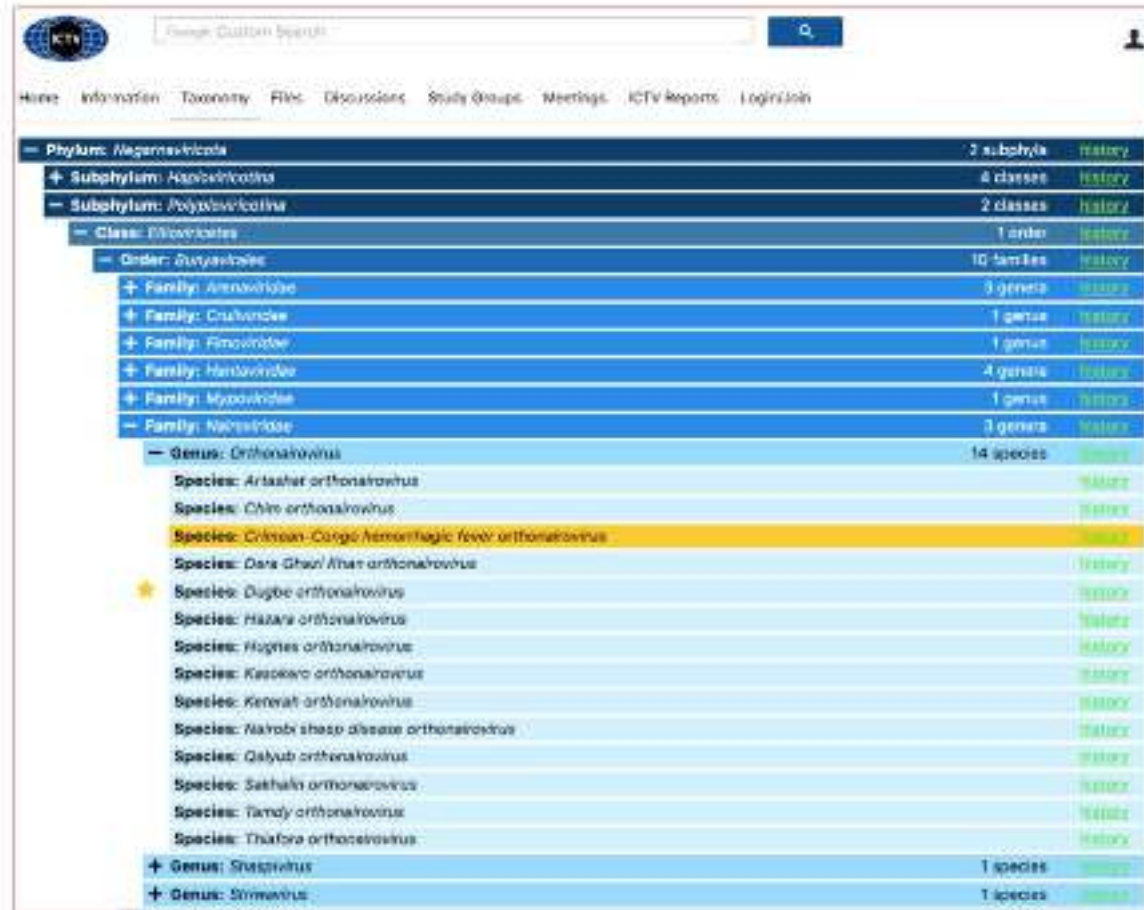
- **Bunyaviridae** ailesinin Nairovirüs cinsinde RNA virüsü
- Bunyavirüsler, 2016 yılında Uluslararası Virüs Taksonomisi Komitesi tarafından yeniden sınıflandırıldı



<https://talk.ictvonline.org/taxonomy/>

Bunyavirales takımı içindeki Nairoviridae ailesinin Orthonaviridae cinsi içinde

Virüs Sınıflandırma



ICTV

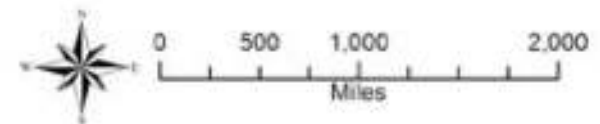
Home Information Taxonomy Files Discussions Study Groups Meetings ICTV Reports Login/Join

Phylum: Negamaviricota	2 subphyla	history
Subphylum: Kapteviricota	4 classes	history
Subphylum: Polyviricota	2 classes	history
Class: Bunyavirales	1 order	history
Order: Bunyavirales	10 families	history
Family: Arenaviridae	9 genera	history
Family: Cruxviridae	1 genus	history
Family: Finoviridae	1 genus	history
Family: Hantaviridae	4 genera	history
Family: Myxoviridae	1 genus	history
Family: Nairoviridae	3 genera	history
Genus: Orthonaviridae	14 species	history
Species: Artashat orthonaviridae		history
Species: Chilo orthonaviridae		history
Species: Crimean-Congo hemorrhagic fever orthonaviridae		history
Species: Dara Ghul/Alhar orthonaviridae		history
Species: Dugbe orthonaviridae		history
Species: Hazara orthonaviridae		history
Species: Hognes orthonaviridae		history
Species: Kasokero orthonaviridae		history
Species: Kerevat orthonaviridae		history
Species: Nairobi sheep disease orthonaviridae		history
Species: Qalyub orthonaviridae		history
Species: Sakhalin orthonaviridae		history
Species: Tandy orthonaviridae		history
Species: Thafora orthonaviridae		history
Genus: Stuspeviridae	1 species	history
Genus: Symmetviridae	1 species	history



CRIMEAN-CONGO HEMORRHAGIC FEVER DISTRIBUTION MAP

Areas endemic for CCHF





HHS Public Access

Author manuscript

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Published in final edited form as:

Curr Opin Virol. 2019 February ; 34: 70–78. doi:10.1016/j.coviro.2018.12.002.

Crimean-Congo hemorrhagic fever and expansion from endemic regions

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Centers for Disease Control and Prevention, Atlanta, GA 30333, USA

Endemik olmayan ülkelerde importe vakalar: Fransa, Almanya, İngiltere

Confirmed imported cases of CCHF to non-endemic countries have been reported in France (from Senegal, 2004) [37], Germany (from Afghanistan, 2009) [38], and the United Kingdom (two cases—from Afghanistan in 2012 and from Bulgaria in 2014) [39,40]. Additional suspected or unpublished imported cases include, one in the UK (from Zimbabwe, 1997) [41] and one in Germany (from Bulgaria, 2001) [42]. Only a well-trained,

BRIEF REPORT

2016 yılında İspanya'da yerli vakalar

Autochthonous Crimean–Congo Hemorrhagic Fever in Spain

A. Negrodo, F. de la Calle-Prieto, E. Palencia-Herrejón, M. Mora-Rillo, J. Astray-Mochales, M. P. Sánchez-Seco, E. Bermejo Lopez, J. Menárguez, A. Fernández-Cruz, B. Sánchez-Artola, E. Keough-Delgado, E. Ramírez de Arellano, F. Lasala, J. Milla, J.L. Fraile, M. Ordobás Gavín, A. Martínez de la Gándara, L. López Perez, D. Diaz-Diaz, M.A. López-García, P. Delgado-Jimenez, A. Martín-Quirós, E. Trigo, J.C. Figueira, J. Manzanares, E. Rodríguez-Baena, L. Garcia-Comas, O. Rodríguez-Fraga, N. García-Arenzana, M.V. Fernández-Díaz, V.M. Cornejo, P. Emmerich, J. Schmidt-Chanasit, and J.R. Arribas, for the Crimean Congo Hemorrhagic Fever@Madrid Working Group*

SUMMARY

The authors' full names, academic degrees, and affiliations are listed in the Appendix. Address reprint requests to Dr. Arribas at the High Level Isolation Unit, Hospital Universitario La Paz, Idipaz, Castellana 261 28046, Madrid, Spain, or at joser.arribas@salud.madrid.org.

*A complete list of the members of the Crimean Congo Hemorrhagic Fever@Madrid Working Group is provided in the Supplementary Appendix, available at NEJM.org.

Drs. Negrodo and de la Calle-Prieto contributed equally to this article.

Crimean–Congo hemorrhagic fever (CCHF) is a widely distributed, viral, tickborne disease. In Europe, cases have been reported only in the southeastern part of the continent. We report two autochthonous cases in Spain. The index patient acquired the disease through a tick bite in the province of Ávila — 300 km away from the province of Cáceres, where viral RNA from ticks was amplified in 2010. The second patient was a nurse who became infected while caring for the index patient. Both were infected with the African 3 lineage of this virus. (Funded by Red de Investigación Cooperativa en Enfermedades Tropicales [RICET] and Efficient Response to Highly Dangerous and Emerging Pathogens at EU [European Union] Level [EMERGE].)



Arboviruses in the Mediterranean Countries

6th FEMS Symposium

Present Status of Arbovirus Sero-Epidemiology in the Aegean Region of Turkey

Demir Seretin

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Ege University, Izmir, Turkey

Bunyavirus-like genus: Crimean Hemorrhagic Fever-Congo virus (CHF-C) was used as antigen. % 9.21 of the sera were found to contain HA-inhibiting antibodies against the antigen (Table 8). This percentage is quite high for such a tick-borne infection. This high percentage



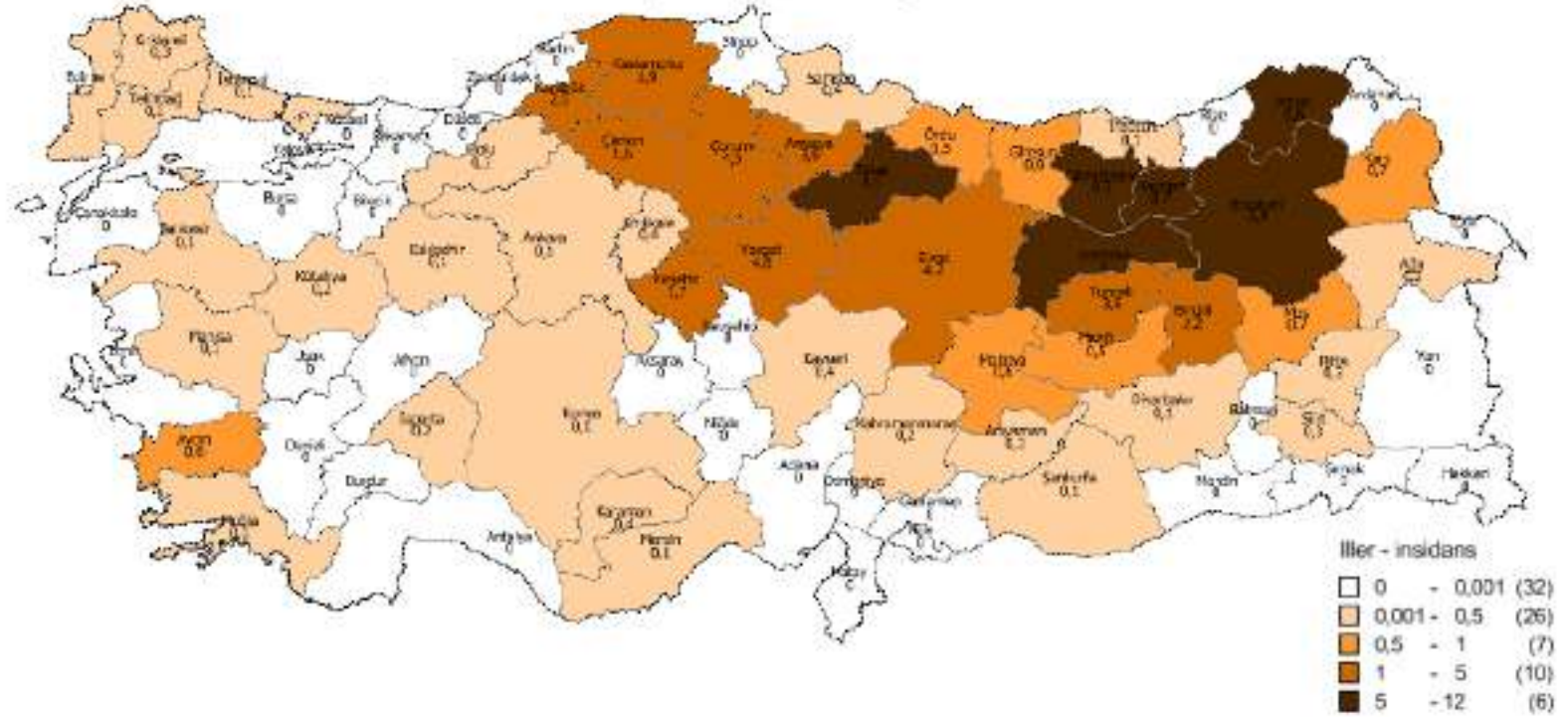
T.C. SAĞLIK BAKANLIĞI
Halk Sağlığı Genel Müdürlüğü

Kırım Kongo Kanamalı Ateşi İnsidans Haritası (Türkiye, 2002-2003)





Kırım Kongo Kanamalı Ateşi İnsidans Haritası (Türkiye, 2017)



Alanya'dan da vakalar bildirildi, Türkiye'nin her yerinde görülebilir



Kırım Kongo Kanamalı Ateşi

- Ülkemizde 2002 yılında dikkatleri çekti
- 2003 yılında kanıtlandı



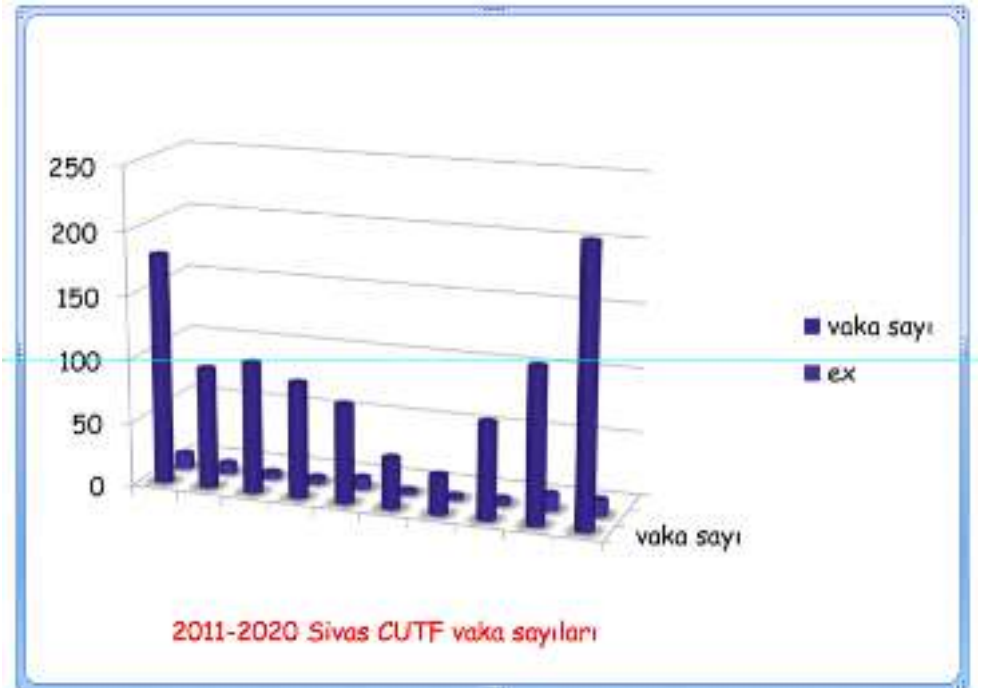
KKKA vaka	KKKA pozitif vaka sayısı	KKKA ölen vaka sayısı	Ölüm %
Türkiye geneli 2002-2020 (Prof. Dr. Nazif Elaldı)	13091	606	4.6
SCUTF (2002-202)	2022	153	7.5



Kırım Kongo Kanamalı Ateşi Vaka ve Ölüm Sayılarının Yıllara Göre Dağılımı, Türkiye, 2002-2018



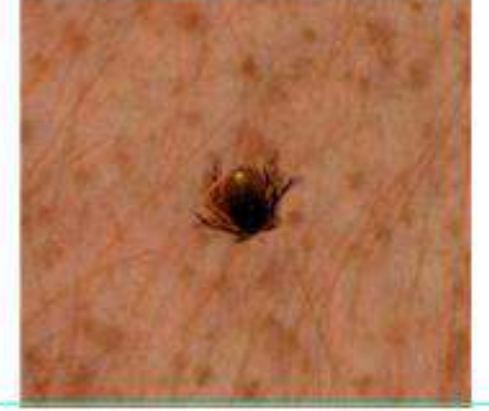
20.05.2021: 48 pozitif vaka, 3 ex



Trans-ovariyal, trans-stadial geiř



Isırılma ağrısız
Kene umaz



Larva

Nimf

Erkek eriřkin
kene

Diři eriřkin
kene

Nimf (deriye yapıřmıř)



Erkek eriřkin
Hyalomma



Diři eriřkin
Hyalomma



Diři eriřkin
Hyalomma kan emmiř



Kene kusturulmamalı!

KKKA inkübasyon

- Bulaş yolu, viral yük önemli
- Kene ısırması/teması 1-3 gün (en fazla 9 gün?)
- İnfekte kan, vücut sıvısı ve doku teması 3-10 gün (en fazla 13 gün)

İnkübasyon süresi uzun olabilir!

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Journal homepage: www.elsevier.com/locate/ijid



Ölgu Sunumu/Case Report

Mikrobiyol Bul 2012; 46(1): 129-133

Kocaeli'de Uzun Inkübasyon Süreli Sporadik Kırım-Kongo Kanamalı Ateşi Olgusu

A Case of Crimean-Congo Hemorrhagic Fever with Long Incubation Period in Kocaeli, Turkey

Crimean-Congo hemorrhagic fever disease due to tick bite with very long incubation periods

Ali Kaya^{a,*}, Aynur Engin^b, Ahmet Sami Güven^a, Füsün Dilara İçağasıoğlu^a, Ömer Cevit^a, Nazif Elaldı Abdülaziz Gültürk^a

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Ottawa, Canada

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Incubation period

SUMMARY

Background: Crimean-Congo hemorrhagic fever (CCHF) is a zoonotic viral disease with a high mortality rate, and is one of the viral hemorrhagic fever syndromes. The average mortality rate of CCHF is 3–33%. Research indicates that the longest incubation period after a tick bite is 12 days in CCHF disease. However, in clinical practice, we encounter patients with CCHF as a result of tick bites with much longer incubation periods (max. 53 days) than those reported in the literature. We present herein CCHF is presumably infected through tick bites and having incubation periods longer than the upper limit reported in the literature.

Methods: We analyzed the cases of the 825 CCHF patients admitted to our hospital from 2007 to 2010 and found that 312 of them had undoubtedly been bitten by a tick. We searched the patient records information on the incubation period and found that 12 patients had experienced an incubation period over 12 days, which is the longest incubation period stated in the literature for patients definitely bit by a tick.

Results: A total of 12 patients (eight males and four females, with a mean age of 45 years) were recruited into this study. Five (41.7%) of the 12 patients had positive CCHF virus-specific IgM antibodies, three (25%) had a positive reverse transcription polymerase chain reaction test for CCHF virus, and four (33.3%) positive results in both tests during the acute and/or convalescent phase of the disease. In these cases, interval between tick bite and the onset of symptoms was a mean of 23.6 days (range 13–53 days).

Conclusion: Physicians serving in endemic regions should be aware of these longer incubation periods.

Meliha MERİÇ KOÇ, Ayşe WILLKE

Kocaeli Üniversitesi Tıp Fakültesi, Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Anabilim Dalı, Kocaeli, Kocaeli University Faculty of Medicine, Department of Infectious Diseases and Clinical Microbiology, Kocaeli, Turkey.

Gölyazıt, Türkiye (Received: 01.06.2011) • Balıkesir, Türkiye (Accepted: 15.09.2011)

ÖZET

Kırım-Kongo kanamalı ateşi (KKKA), yüksek mortalite hızına sahip viral kanamalı bir hastalıktır. Ülke içinde KKKA, İç Anadolu, Doğu ve Orta Karadeniz bölgelerinde endemik, diğer bölgelerde ise sporadik olarak görülmektedir. Hastalığın inkübasyon süresi 1–3 gün (maksimum 12 gün) arasında bildirilmektedir. Bu raporda, 30 günlük uzun bir inkübasyon dönemi sonrasında ortaya çıkan bir KKKA olgusu sunulmaktadır. Kocaeli'nin Kandıra İlçesi Alabey Köyü'nde yaşayan 40 yaşında kadın hasta, Haziran 2010 tarih

KKKA klinik

- Ateş, üşüme-titreme
- Baş ağrısı, kas ağrıları, halsizlik
- Bulantı, kusma, bazı hastalarda ishal
- Birkaç gün sonra kanamalar (cilt, burun vb)
- Ağır hastalarda: Şuur bulanıklığı, melena, şok, multipl organ yetmezliği ve ölüm



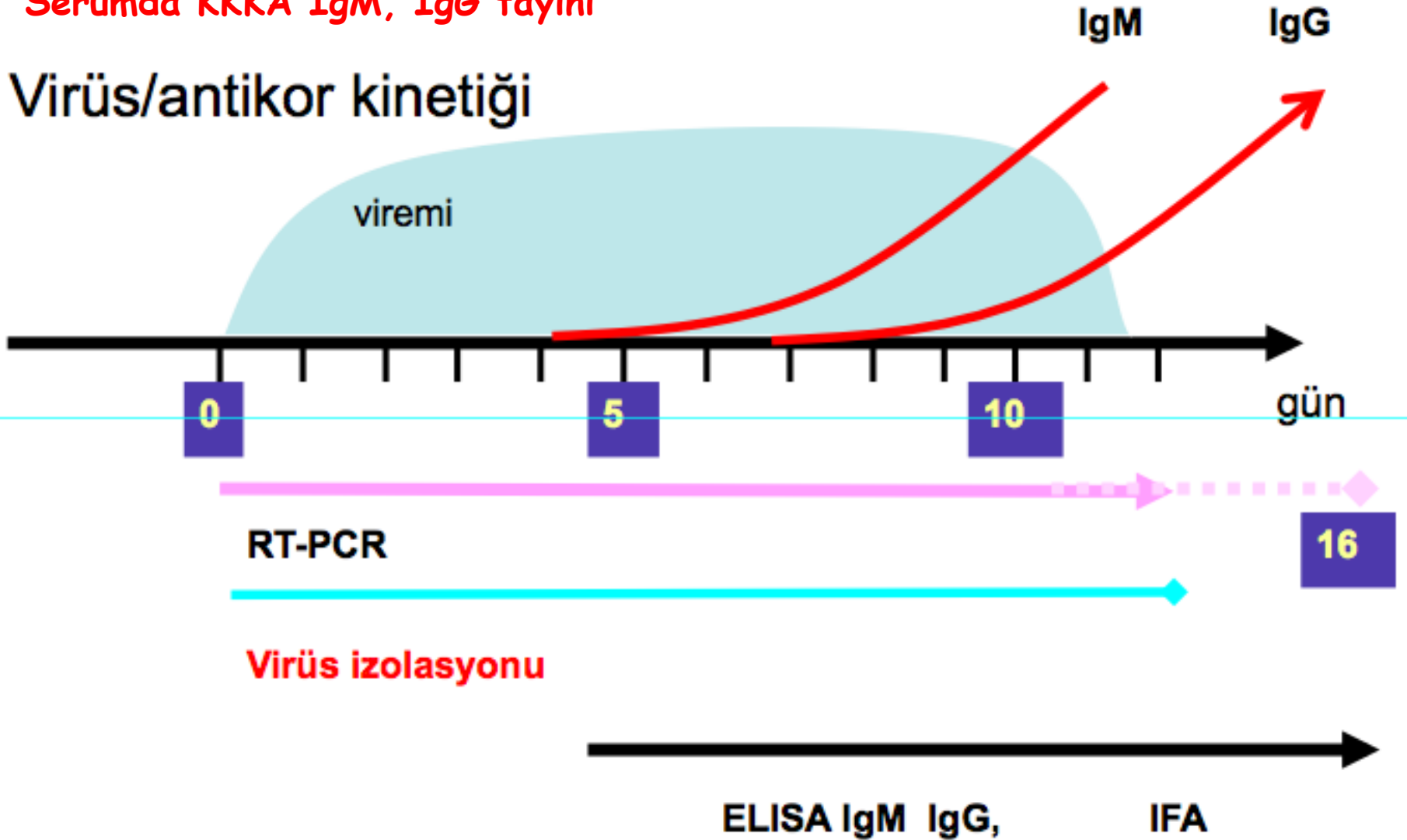
T.C.S.B. Türkiye Zoonotik Hastalıklar Eylem Planı (2019-2023)
Fotoğraflar Prof. Dr. Mehmet Bakır'ın izniyle

KKKA laboratuvar

- **Trombositopeni (olmazsa olmaz!),** lökopeni/lökositoz*
- AST □, ALT □, GGT □, LDH □, CPK □
- Koagülasyon fonksiyon testlerinde bozulma
 - PT□, INR□, aPTT□, D-dimer□, Fibrinojen □
- Anemi (majör kanama varsa, önceden varsa)
- BUN ve kreatinin (her vakada yükselmez!)

Tanı: Moleküler tanı testleri, RT-PCR
Serumda KKKA IgM, IgG tayini

Virüs/antikor kinetiği



IgM pozitifliği: 2-3 ay (6 aya kadar devam edebilir)

IgG pozitifliği: 5 yıl (ömür boyu ?)

KKKA iyileşme

- İyileşme 9-10. günlerde olur
- Trombosit yükselir
- İyileşen olgularda sekel görülmez

KKKA destek tedavisi

- Tedavinin temelini oluşturur
- Aspirin ve diğer pıhtılaşmayı bozabilecek ilaçlar verilmemeli
- Kan komponentlerinin izlenmesi, gerekirse replasmanı (Trombosit $<10000/mm^3$ ise replasman, ateş varsa $20.000/mm^3$, INR $>1,5$ ise ve aPTT uzamışsa TDP vb)
- Geremediği sürece invaziv işlemlerden kaçınılmalı

KKKA tedavi

- Ribavirin; Tartışmalı
- DSÖ; etkili
- İlk 5 gün içinde ?

Oral

2000 mg yükleme dozu

**Dört gün her altı saatte
bir 1000 mg**

**Altı gün her altı saatte
bir 500 mg**

KKKA korunma

- Aşısı yok
- Endemik alanda mümkünse kenelerin bol bulunduğu alanlara gitmeyin
- Giysi ve deriye sinek, böcek kovucular
- Çizme, pantolon paçaları çorap içine alınmalı
- **Beyaz kıyafet kenenin kolay fark edilmesini sağlar**
- İnfekte materyalle korumasız temas varsa ribavirin proflaksisi, 4 x 0.5 gr/ 7gün oral



Tek kişilik hasta odası





İlginiz için teşekkür ederim



Aynur Engin