OLGU SUNUMLARI

Firdevs Aktaş

CALIFORNIA'DA DOKTOR OLMAK ?
VEYA OLMAMAK?

2017 California ,San Diego

2017 California ,San Diego

ŞEHRİN ÖTEKİ YÜZÜ

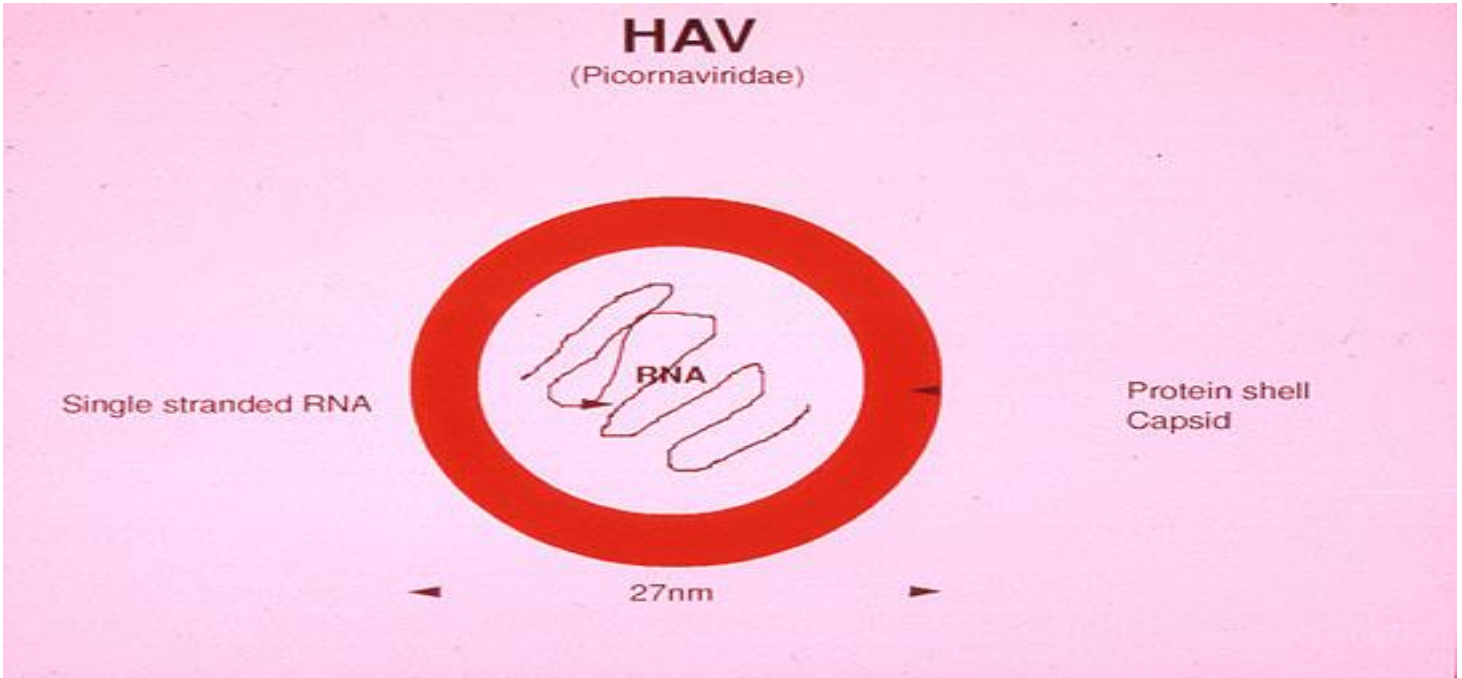
OLGU

- 42 yaşında erkek hasta
- San Diago'da yaşıyor, evsiz
- 5 gündür olan halsizlik, oral alım bozukluğu, vücutta yaygın ağrı, çay rengi idrar yapma şikayetleri olduğu öğrenildi.
- Çevresinde de benzer şikayeti olanlar olduğunu belirtti
- Fizik muayenesinde skleralar ve cilt ikterik olup karaciğer kot altından 1-2 cm ele geliyordu.

Laboratuvar

- AST: 913 IU/L
- ALT: 942 IU/L
- ALP: 99 IU/L
- GGT: 38 IU/L
- Total bilirubin: 15,9 mg/dL , direkt bilirubin: 12,7 mg/dL
- WBC: 6300 /mm^3 , Hb:11,5 gr/dL , Plt:222.000 /mm^3
- PT:0.9 INR
- Anti HAV IgM (+)


HEPATITIS A
OUTBREAK


HAV
(Picornaviridae)
Single stranded RNA
RNA
Protein shell
Capsid
27nm

California Department of Public Health

KAREN L. SMITH, MD, MPH
Director and State Health Officer

EDMUND G. BROWN JR.
Governor

October 19, 2017 - Updated Clinical Advisory

(supercedes July 13, 2017 Clinical Advisory)

Hepatitis A Outbreak in California - Limited Adult Vaccine Supply Forecast for Fall, 2017

An outbreak of hepatitis A virus (HAV) disease is ongoing in California among persons experiencing homelessness or using illicit drugs in settings of limited sanitation. In San Diego County, at least 507 HAV cases and 19 deaths have been reported since November 2016. In Santa Cruz County, at least 73 cases have been reported since April 2017. Cases due to the same strain of HAV have been identified in these and other counties as well as in several other states.

HAV is being spread person-to-person in this outbreak. As the use of adult hepatitis A vaccine has increased to help control this outbreak and outbreaks in other states, the supplies for adult immunization for the last quarter of 2017 have become constrained.

In California, hepatitis A transmission and risk vary by county and can vary within counties. CDPH therefore recommends the following:

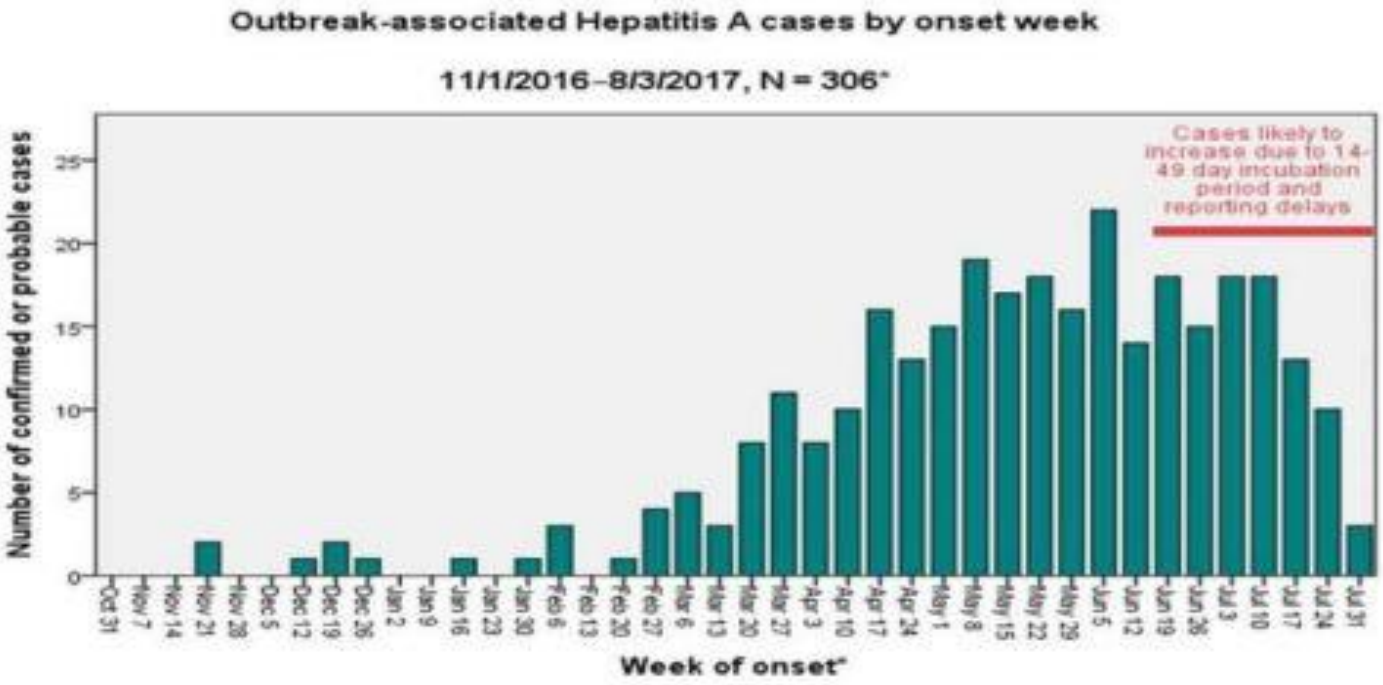
1) Vaccines should be prioritized for areas with ongoing transmission of hepatitis A and for groups at increased risk of infection in those areas. Please contact your local health

In California, hepatitis A transmission and risk vary by county and can vary within counties. CDPH therefore recommends the following:

1) Vaccines should be prioritized for areas with ongoing transmission of hepatitis A and for groups at increased risk of infection in those areas. Please contact your local health department regarding local immunization recommendations, including recommendations regarding occupational groups.
2) Depending on vaccine availability, clinicians seeing patients in primary care settings should consider vaccination of persons routinely recommended to receive hepatitis A vaccine. Based on your local health department recommendations, priority should be given to those the individual patients who have the highest immediate risk of acquiring hepatitis A infection or becoming severely ill if infected. Groups that are routinely recommended to receive hepatitis A vaccine include:
    a. Persons exposed to a case of hepatitis A
    b. Persons with chronic liver disease
    c. Men who have sex with men
    d. Persons using illicit drugs, other than marijuana
    e. Persons experiencing homelessness
    f. Travelers to countries where hepatitis A is common

Immunization Branch / Division of Communicable Disease Control
850 Marina Bay Parkway, Bldg. P, 2nd Floor, Richmond, CA 94804
(510) 620-3737 • FAX (510) 620-3774 • Internet Address: www.getimmunizedca.org

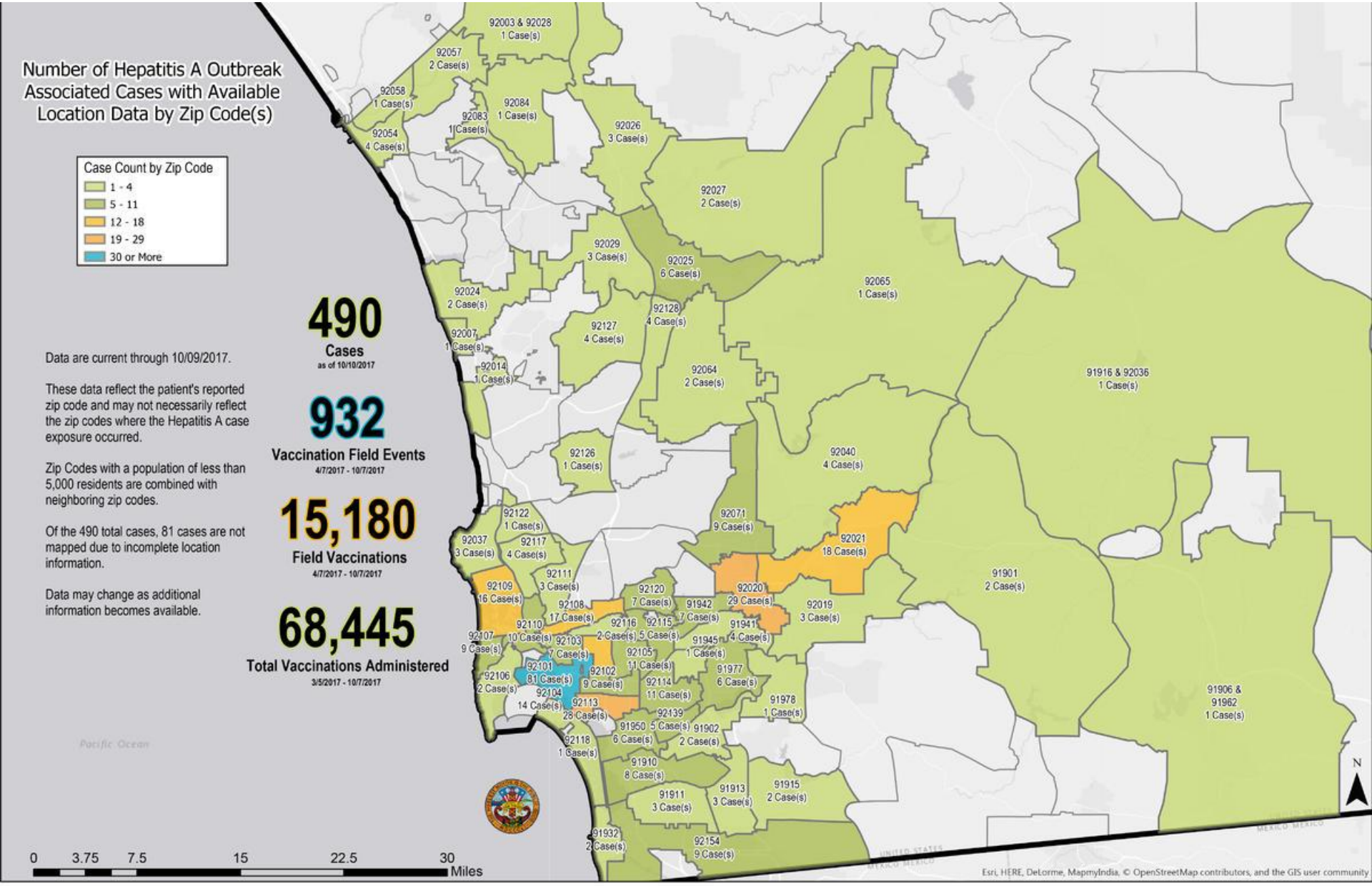
Epi-Curve of Hepatitis A in San Diego



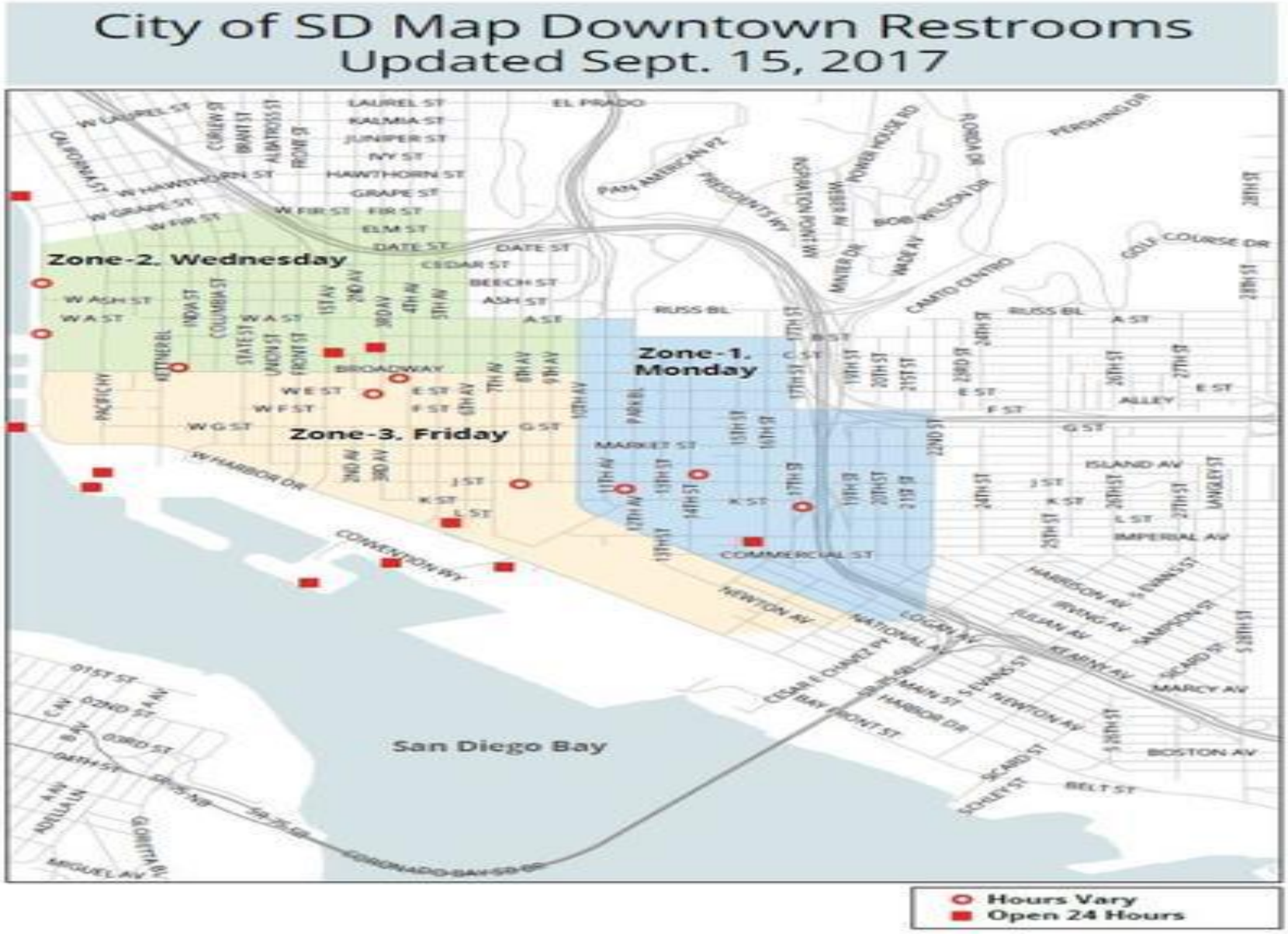
*Date of specimen collection or report used if onset date unknown; dates may change as information becomes available

Modeling suggests that the outbreak will continue for about 18 more months


Ücretsiz hepatit A aşılaması
AMR
OPERATIONS


Number of Hepatitis A Outbreak Associated Cases with Available Location Data by Zip Code(s)
Case Count by Zip Code
1 - 4
5 - 11
12 - 18
19 - 29
30 or More
490
Cases
as of 10/10/2017
932
Vaccination Field Events
4/7/2017 - 10/7/2017
15,180
Field Vaccinations
4/7/2017 - 10/7/2017
68,445
Total Vaccinations Administered
3/5/2017 - 10/7/2017
Data are current through 10/09/2017.
These data reflect the patient's reported zip code and may not necessarily reflect the zip codes where the Hepatitis A case exposure occurred.
Zip Codes with a population of less than 5,000 residents are combined with neighboring zip codes.
Of the 490 total cases, 81 cases are not mapped due to incomplete location information.
Data may change as additional information becomes available.
92003 & 92028 1 Case(s)
92057 2 Case(s)
92058 1 Case(s)
92084 1 Case(s)
92083 1 Case(s)
92054 4 Case(s)
92026 3 Case(s)
92027 2 Case(s)
92029 3 Case(s)
92025 6 Case(s)
92065 1 Case(s)
92024 2 Case(s)
92128 4 Case(s)
92007 1 Case(s)
92127 4 Case(s)
92014 1 Case(s)
92064 2 Case(s)
91916 & 92036 1 Case(s)
92126 1 Case(s)
92040 4 Case(s)
92122 1 Case(s)
92071 9 Case(s)
92037 3 Case(s)
92117 4 Case(s)
92021 18 Case(s)
92111 3 Case(s)
91901 2 Case(s)
92109 16 Case(s)
92120 7 Case(s)
92020 29 Case(s)
92108 17 Case(s)
91942 7 Case(s)
92019 3 Case(s)
92110
92116
92115
91941 4 Case(s)
92107 9 Case(s)
92103 7 Case(s)
2 Case(s)
5 Case(s)
91945 1 Case(s)
92105 11 Case(s)
92101 81 Case(s)
92102 9 Case(s)
91977 6 Case(s)
92106 2 Case(s)
92104 14 Case(s)
92114 11 Case(s)
91978 1 Case(s)
92113 28 Case(s)
92139
91950 6 Case(s)
5 Case(s)
91902 2 Case(s)
91906 & 91962 1 Case(s)
92118 1 Case(s)
91910 8 Case(s)
91911 3 Case(s)
91913 3 Case(s)
91915 2 Case(s)
91932 2 Case(s)
92154 9 Case(s)
Pacific Ocean
0 3.75 7.5 15 22.5 30 Miles
N
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

KENTİN TUVALET HARİTASI



MOBİL TUVALET VE LAVABOLAR


United
1-800-TOILETS

AŞI UYARILARI


WATER

Fever

Fatigue

Nausea

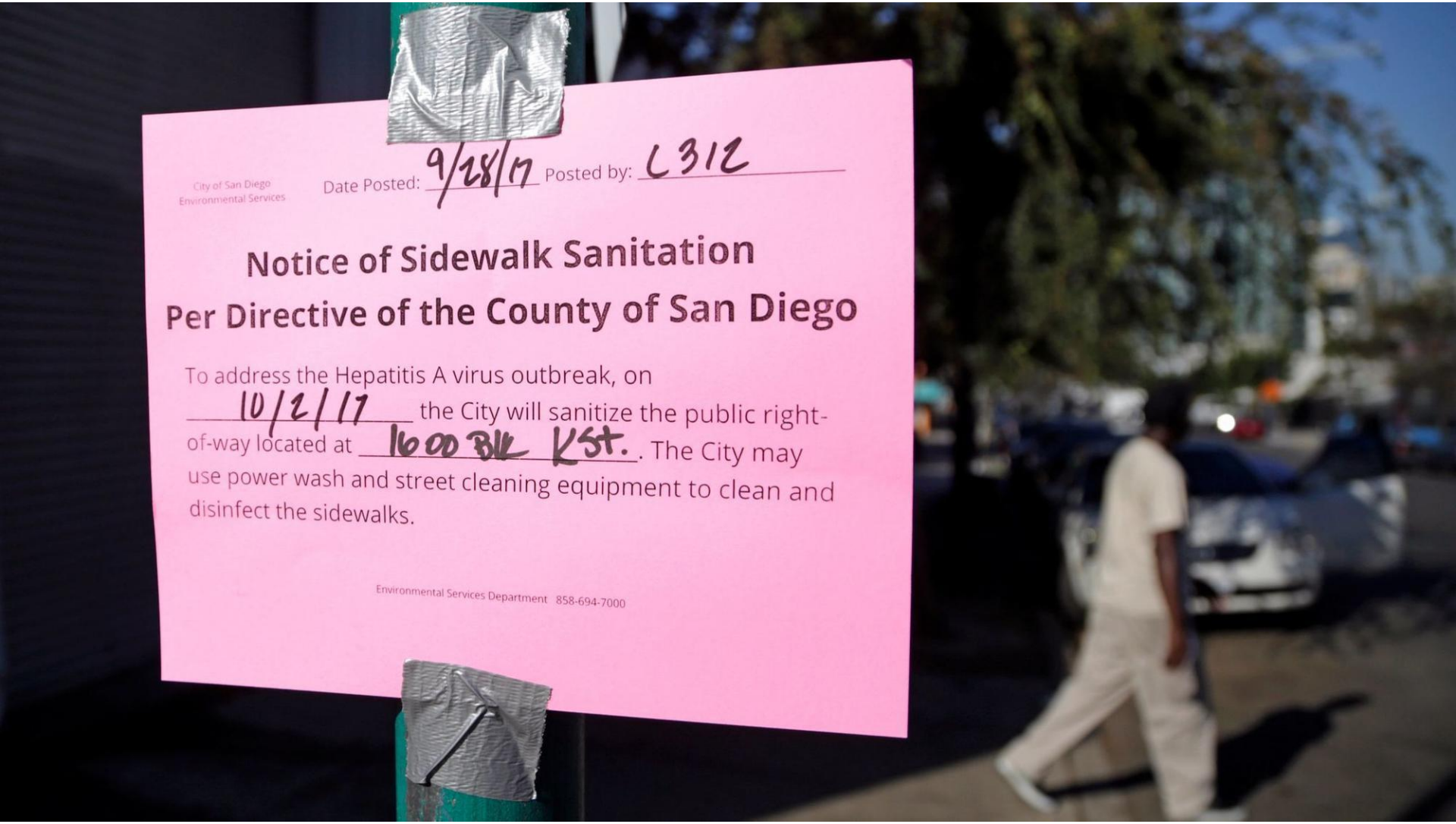
Loss of appetite

Jaundice (yellowing of the skin or eyes)

Stomach pain

Vomiting

Dark urine, pale stools, and diarrhea


City of San Diego
Environmental Services
Date Posted: 9/28/17 Posted by: L312
Notice of Sidewalk Sanitation
Per Directive of the County of San Diego
To address the Hepatitis A virus outbreak, on 10/2/17 the City will sanitize the public right-of-way located at 1600 Blk K St.. The City may use power wash and street cleaning equipment to clean and disinfect the sidewalks.
Environmental Services Department 858-694-7000


LIVE
NEW DEVELOPMENTS
ONev
SAN DIEGO ENDS HEPATITIS A EMERGENCY
abc 10
5:04 66°

Health Care Providers

Disease Info and Reports

Laws and Regulations

Vacunas Y Mi Salud (Spanish Info)

CDPH will update this report every two weeks. This report contains numbers as of January 1

A large hepatitis A outbreak is ongoing in California. The majority of patients in this outbreak repo homelessness and/or using illicit drugs in settings of limited sanitation. The outbreak is being spr person and through contact with a fecally contaminated environment. The Centers for Disease Co Prevention (CDC) notes that person-to-person transmission through close contact is the primary hepatitis A in the United States.

San Diego, Santa Cruz, and Los Angeles Counties have declared local outbreak status. Outbreak a have been confirmed in other California jurisdictions.

Table. Outbreak Associated Hepatitis A infections by California Jurisdiction

Jurisdiction	Cases	Hospitalizations	Deaths
San Diego	576	395	20
Santa Cruz	76	33	1
Los Angeles	12	8	0
Other	24	13	0
Total	688	449	21

FULMİNAN HEPATİT

HAV Akut infeksiyonlarında karaciğer yetmezliği gelişebilir

FULMİNAN HEPATİT

- Akut karaciğer yetmezliğinin en önemli bulgusu, hepatik ensefalopatidir.
- Konfüzyon, koma, şiddetli sarılık, kusma, fetor hepatikus, flapping tremor izlenebilir.
- Transaminaz düzeyleri hızla düşerken protrombin zamanı uzar.

BİR ZAMANLAR AMERİKA'DA ORTOPEDİ DOKTORUNUN ÖYKÜSÜ

SUÇ KİMDE?

OLGU

- Bistüri yaralanması ile başvuran ortopedik cerrah
- HbsAg pozitif
- HBeAg pozitif
- Anti HBC IgM NEGATİF
- Anti HBs negatif
- HBV DNA 17.9 million IU/mL).
- Daha önce İki üc doz Hepatit B aşısı uygulanmış
- Anti HBs negatif kalmış

Bu cerrahın ameliyat ettiği hastalara ne oldu?

RETROSPEKTİF KOHORT ÇALIŞMASI

- Cerrahın ameliyat ettiği hastalara ULAŞILDI
- 232 hastaya ulaşıldı ve test yapıldı
- 2 akut HBV
- Akut HBV saptanan hastaların ve ortopedistin HBV genom analizi > % 99.9 aynı
- Toplam 8 doğrulanmış veya olası HBV vakasının 5 ine kalça, 3üne diz replasmanı yapılmış.

Transmission of Hepatitis B Virus From an Orthopedic Surgeon With a High Viral Load

Kyle B. Enfield,[1,2] Umid Sharapov,[3] Keri K. Hall,[1,4] John Leiner,[5] Carl L. Berg,[6] Guo-liang Xia,[3] Nicola D. Thompson,[3] Lilia Ganova-Raeva,[3] and Costi D. Sifri[1,4]

[1]Office of Hospital Epidemiology and [2]Division of Pulmonary/Critical Care Medicine, University of Virginia Health System, Charlottesville; [3]Division of Viral Hepatitis, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia; [4]Division of Infectious Diseases and International Health, [5]Division of General Internal Medicine, Geriatrics, and Palliative Care, and [6]Division of Gastroenterology and Hepatology, University of Virginia Health System, Charlottesville

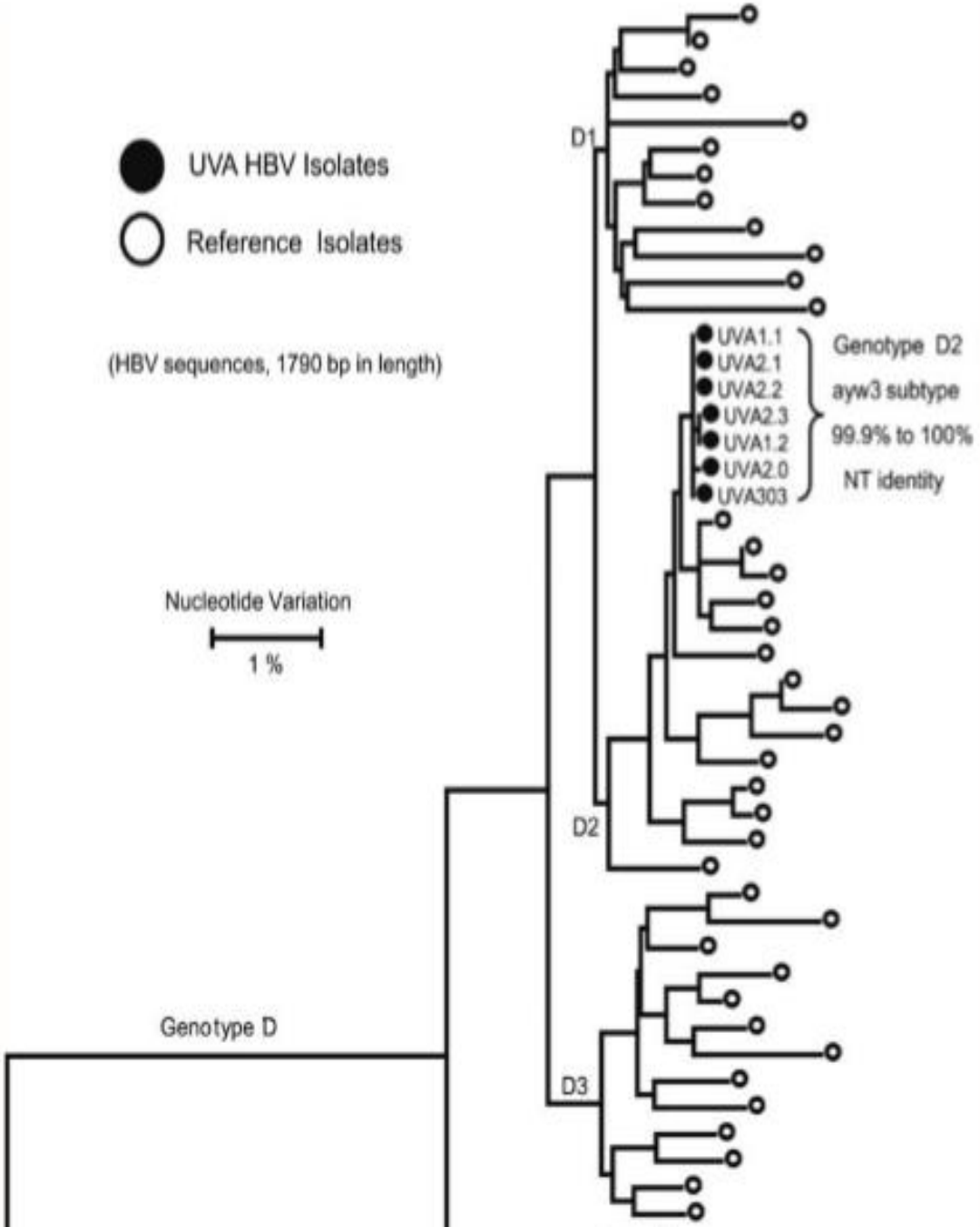
(See the Editorial Commentary by Henderson, on pages 225–7.)

Background. During the evaluation of a needle-stick injury, an orthopedic surgeon was found to be unknowingly infected with hepatitis B virus (HBV) (viral load >17.9 million IU/mL). He had previously completed two 3-dose series of hepatitis B vaccine without achieving a protective level of surface antibody. We investigated whether any surgical patients had acquired HBV infection while under his care.

Methods. A retrospective cohort study of all patients who underwent surgery by the surgeon was conducted. Patients were notified of their potential exposure and need for testing, and samples with positive HBV loads underwent DNA sequencing. Characteristics of the surgical procedures for the cohort were evaluated.

Results. A total of 232 (70.7%) of potentially exposed patients consented to testing; 2 were found to have acute infection and 6 had possible transmission (evidence of past exposure without risk factors). Genome sequence analysis of HBV DNA from the infected surgeon and patients with acute infection revealed genetically related virus (>99.9% nucleotide identity). Only age was found to be statistically different between those with confirmed or possible HBV transmission and those who remained susceptible to HBV.

Conclusions. We documented HBV transmission during orthopedic surgery to 2 patients from a surgeon with HBV. This investigation highlights the importance of evaluating individuals who do not respond to 2 series of HBV vaccination, the increased risk of HBV transmission from providers with high viral loads, and the need to evaluate the clinical practice of providers with HBV and implement appropriate procedure-based practice restrictions.


UVA HBV Isolates
Reference Isolates
(HBV sequences, 1790 bp in length)
Nucleotide Variation
1 %
Genotype D
D1
D2
D3
UVA1.1
UVA2.1
UVA2.2
UVA2.3
UVA1.2
UVA2.0
UVA303
Genotype D2
ayw3 subtype
99.9% to 100%
NT identity

SORUNLAR

- AŞI YANITI ELDE EDİLMEYEN BİR CERRAH
- Takibi
- İş kısıtlaması
- Çalışma koşulları

Hepatit B

- HBV içeren kanla kontamine kesici delici alet yaralanmalarından sonra hepatit B riski % 6-30
- Sağlık çalışanlarında kesici ve delici alet yaralanmaları yüksek (cerrahların % 86 sında en az bir kez)
- Sağlık personelinden hastaya bulaşma da göz ardı edilemez

HEPATİT B AŞISI

- Rekombinan hepatit B aşısı
  0-1-6 aylarda İM deltoit kasa yapılır
- Hızlandırılmış şema (0-1-4 ve 0-1-2 ay)da 12. ayda ek doz önerilir
- Aşılama öncesi serolojik test yapılması gerekli değil
- Riskli toplumlarda aşı öncesi test öneriliyor*
- HBsAg prevalansı yüksek (%8 ve üzeri)ve orta (% 2-7)düzeyde olan toplumlarda aşılama öncesi test maliyet etkin

Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on ***Immunization*** Practices (ACIP). MMWR, ***2011***; 60(RR-7). 2

HEPATİT B AŞISI

- Aşılamadan 4-8 hafta sonra antiHBs bakılır
- >10mIU/ml ise koruyucu
- Bir kez koruyucu antikor gelişmişse anti HBs takibi ve ek doz gerekli değil
- Antikor düzeyi yeterli olmasa bile klinik hastalık ve viremi gelişmez
- İmmün süprese personele anti HBs bakılarak rapel doz önerilir.

HEPATİT B AŞISI

- Üç doz aşı ile anti-HBs < 10mIU/ml ise 4. doz yapılarak 1-2 ay sonra antikor bakılır
- Cevapsızların % 15-25 i 4. dozdan sonra koruyucu antikor geliştirir
- 4. dozdan sonra anti-HBs < 10mIU/ml ise iki doz daha yapılır.
- İlk aşılama şemasına cevapsızların % 50 si ikinci şema tamamlandıktan sonra koruyucu antikor geliştirir.

HEPATİT B AŞISI
(Özel Durumlar)

Aşı yanıtsızları

- İkinci üç dozluk aşılama şeması tamamlandıktan sonra anti HBs gelişmezse yeni aşılama önerilmez
- Kronik diyaliz merkezlerinde çalışan aşı yanıtsızlarına yılda bir HBsAg, antiHBs bakılması önerilir

CHICAGO JOURNALS

SHEA Guideline for Management of Healthcare Workers Who Are Infected with Hepatitis B Virus, Hepatitis C Virus, and/or Human Immunodeficiency Virus •

Author(s): David K. Henderson, MD; Louise Dembry, MD, MS, MBA; Neil O. Fishman, MD; Christine Grady, RN, PhD; Tammy Lundstrom, MD, JD; Tara N. Palmore, MD; Kent A. Sepkowitz, MD; David J. Weber, MD, MPH; for theSociety for Healthcare Epidemiology of America

Source: *Infection Control and Hospital Epidemiology*, Vol. 31, No. 3 (March 2010), pp. 203-232
Published by: The University of Chicago Press on behalf of The Society for Healthcare Epidemiology of America
Stable URL: http://www.jstor.org/stable/10.1086/650298

TABLE 1. Summary Recommendations for Managing Healthcare Providers Infected with Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and/or Human Immunodeficiency Virus (HIV)

Virus, circulating viral burden	Categories of clinical activities[a]	Recommendation	Testing
HBV			
$<10^4$ GE/mL	Categories I, II, and III	No restrictions[b]	Twice per year
$\geqslant 10^4$ GE/mL	Categories I and II	No restrictions[b]	NA
$\geqslant 10^4$ GE/mL	Category III	Restricted[c]	NA
HCV			
$<10^4$ GE/mL	Categories I, II, and III	No restrictions[b]	Twice per year
$\geqslant 10^4$ GE/mL	Categories I and II	No restrictions[b]	NA
$\geqslant 10^4$ GE/mL	Category III	Restricted[c]	NA
HIV			
$<5 \times 10^2$ GE/mL	Categories I, II, and III	No restrictions[b]	Twice per year
$\geqslant 5 \times 10^2$ GE/mL	Categories I and II	No restrictions[b]	NA
$\geqslant 5 \times 10^2$ GE/mL	Category III	Restricted[d]	NA

NOTE. These recommendations provide a framework within which to consider such cases; however, each such case is sufficiently complex that each should be independently considered in context by the expert review panel (see text). GE, genome equivalents; NA, not applicable.

[a] See Table 2 for the categorization of clinical activities.

[b] No restrictions recommended, so long as the infected healthcare provider (1) is not detected as having transmitted infection to patients; (2) obtains advice from an Expert Review Panel about continued practice; (3) undergoes follow-up routinely by Occupational Medicine staff (or an appropriate public health official), who test the provider twice per year to demonstrate the maintenance of a viral burden of less than the recommended threshold (see text); (4) also receives follow-up by a personal physician who has expertise in the management of her or his infection and who is allowed by the provider to communicate with the Expert Review Panel about the provider's clinical status; (5) consults with an expert about optimal infection control procedures (and strictly adheres to the recommended procedures, including the routine use of double-gloving for Category II and Category III procedures and frequent glove changes during procedures, particularly if performing technical tasks known to compromise glove integrity [eg, placing sternal wires]), and (6) agrees to the information in and signs a contract or letter from the Expert Review Panel that characterizes her or his responsibilities (see text).

[c] These procedures permissible only when viral burden is $<10^4$ GE/mL.

[d] These procedures permissible only when viral burden is $<5 \times 10^2$ GE/mL.

ORTOPEDİK CERRAHİ RİSK KATEGORİLERİ

- Kategori I: Minimal risk taşıyan işlemler
- Kategori II: Teorik riski olan fakat bulaşma kanıtlanmamış operasyonlar

✓ Major ve minör amputasyonlar

- Kategori III: Yüksek riskli ameliyatlar “exposure-prone”

✓ Total diz ve kalça artroplasti

✓ Major eklem

✓ Açık vertebra ve pelvis cerrahisi

HBV DNA ≥ 10^4 kopya/mL

- Total diz ve kalça artroplasti
- Major eklem
- Açık vertebra ve pelvis cerrahisi YAPAMAZ
- Major ve minör amputasyonlar YAPAR

Tedavi verilir

HBV DNA ≤ 10^4 kopya/mL olunca TÜM AMELİYATLARI YAPABİLİR.

ÖLÜME YOLCULUK

(Femme fatale)

- 47 yaşında Belçika'lı kadın hasta
- Gambia' ya 1 haftalık seyahat etmiş
- 1 Kasımda seyahat başlıyor.
- 7. Kasım'da dönüş günü titreme yüksek ateş, kasağrısı ve halsizlik yakınmalarına bir gün sonra kan ve mukus içermeyen ishal ekleniyor.
- Semptomların başlamasından 7 gün sonra masif gastrointestinal kanama sonucu ölüyor.

Laboratuvar

- Hemoglobin, 12.8 g/dL
- Platelet sayısı, 95,000 /mm3
- BK:4100 /mm3
- Kreatinin :6.9 mg/dL
- BUN :151 mg/dL
- International normalized ratio:3.3
- CRP : 13.8 mg/dL
- Toraks, beyin, karın görüntülemeleri normal
- ALP, 228 U/L
- AST, 49,000 U/L
- ALT, 23,000 U/L
- Total bilirubin, 3.5 mg/dl
- Direkt bilirubin, 2.5mg/L

- Seyahat öncesi sarı humma aşısı yaptırmadığı için sarı humma için araştırılıyor
- Plasma Yellow Fever PCR 1106 kopya/mL.
- Hepatorenal sendrom gelişen hasta Semptomların başlamasından 7 gün sonra masif gastrointestinal kanama sonucu ölüyor.

BRIEF REPORT

A Belgian Traveler Who Acquired Yellow Fever in The Gambia

R. Colebunders,[1,2] J.-L. Mariage,[3] J.-Ch. Coche,[3] B. Pirenne,[3] S. Kempinaire,[3] Ph. Hantson,[4] A. Van Gompel,[1] M. Niedrig,[5] M. Van Esbroeck,[1] R. Bailey,[7] C. Drosten,[6] and H. Schmitz[6]

[1]Institute of Tropical Medicine and [2]University Hospital Antwerp, Antwerp, [3]Clinic St.-Pierre, Ottignies, and [4]St.-Luc Hospital, Université Catholique de Louvain, Brussels, Belgium; [5]Robert Koch Institute, Berlin, and [6]Bernard Nocht Institute for Tropical Medicine, Hamburg, Germany; and [7]Clinical Services Medical Research Council, Fajara, The Gambia

A 47-year-old Belgian woman acquired yellow fever during a 1-week vacation in The Gambia; she had never been vaccinated against yellow fever. She died of massive gastrointestinal bleeding 7 days after the onset of the first symptoms. This dramatic case demonstrates that it is important for persons to be vaccinated against yellow fever before they travel to countries where yellow fever is endemic, even if the country, like The Gambia, does not require travelers to be vaccinated.

World Health Organization (WHO) data suggest that the rate of yellow fever transmission is increasing, especially in sub-Saharan Africa. The WHO estimates that, after adjustment for

son had ever been vaccinated against yellow fever, despite the fact that the mother had traveled to Venezuela in 1998. She had only been advised by her general practitioner to take chloroquine and proguanil as prophylaxis for malaria. When the woman was 20 years old, she had Crohn disease diagnosed, and in 1996, a colostomy had been performed because of multiple abdominal abscesses.

During their 7 days in The Gambia, the woman and her son stayed at a tourist hotel in Bakau. From there, on 2 November, they visited the localities of Serekunda, the Bintang Bolong mangrove, and Brikama town with a local guide. On 3 November, they remained at the hotel in Bakau. On 4 November, they visited the Abuko nature reserve; on 5 November, they visited Tanji (a village of fishermen), the Tanji bird reserve, and Gunjur; and on 6 November, they visited Barra.

On the evening of 7 November, the mother became acutely ill, with a very high temperature, chills, frontal headache, back pain, muscle pain, and asthenia. On 8 November, the woman and her son returned by direct flight from Banjul to The Netherlands. During the flight, she felt very weak and complained of a sore throat. On 9 November, she developed diarrhea, but without blood or mucus in the stool, and she complained of nausea and severe asthenia.

On 10 November, the woman was admitted to the intensive

Sarı Humma

- Aedes aegypti türü sivrisineklerle bulaşan Flaviviridae ailesinden bir RNA virüsüdür.
- Güney Amerika ve Afrika'da bulunmaktadır.
- Sarı humma insandan insana/ maymundan maymuna sivrisinekle bulaşan hastalıktır

Klinik

- Asemptomatik veya hafif seyredebilir.
- İnkübasyon periyodu 3-6 gün
- Ateş, ,titreme, başağrısı,sırt ve genel vücut ağrısı, halsizlik görülür.
- Hastaların % 15 inde ciddi form görülür
- Yüksek ateş, sarlık,kanama, şok ve çoklu organ yetmezliği gelişir, fatal sonlanabilir.

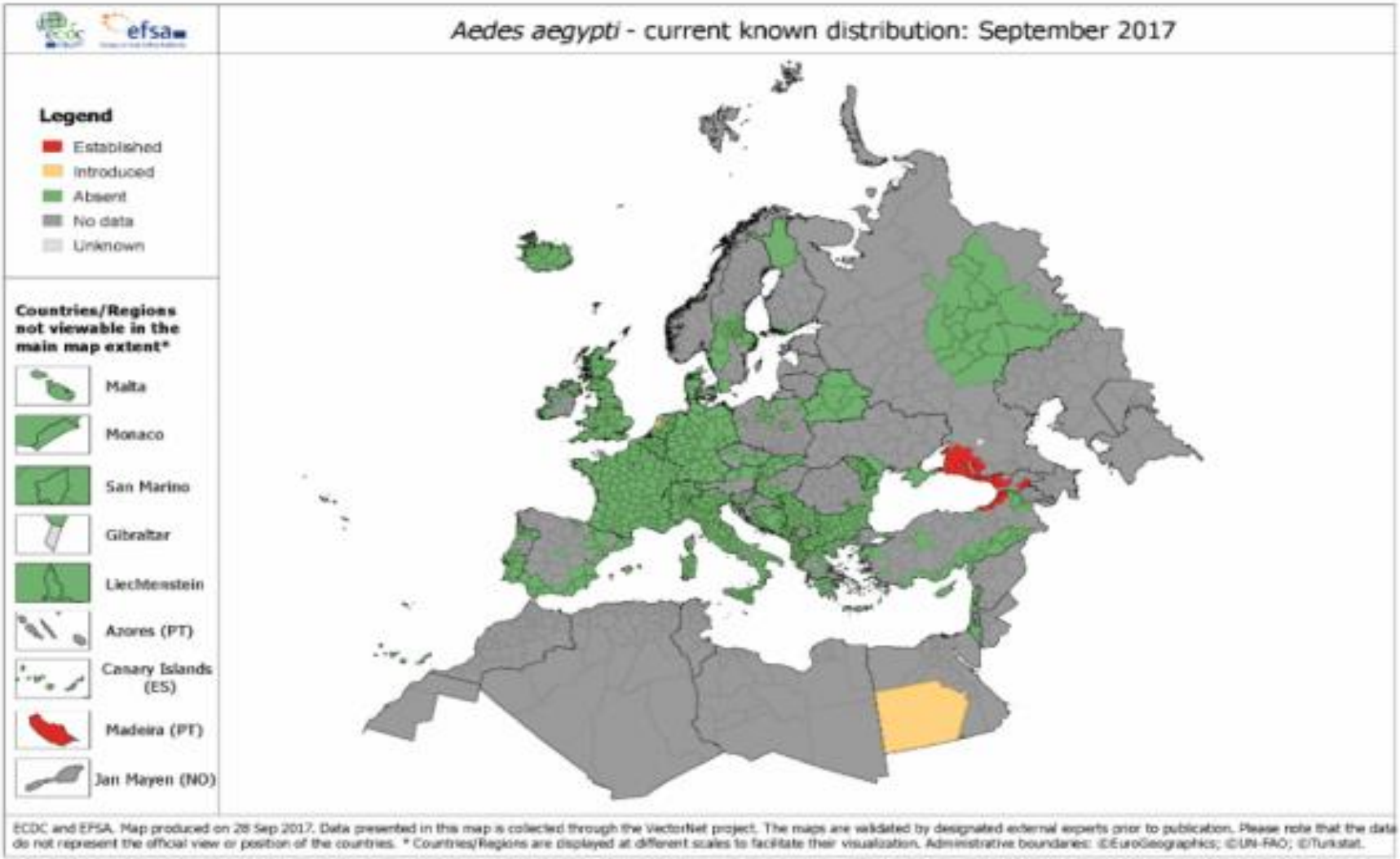
Flaviviridae

- Dengue virus
- Sarı humma virus
- Japanese encephalitis (JE) virus
- Tick-borne encephalitis (TBE) virus
- West Nile virus
- Zika virus

Femme fatale

Figure 1: *Female Adult Aedes aegypti*

Harita 2. *Aedes aegypti*'nin Avrupa Bölgesinde yayılımı



Ae. albopictus'un ise batıda Trakya ve İstanbul, doğuda Doğu Karadeniz Bölgesi'ndeki illerimizden Giresun'a kadar gelmiş olduğu saptanmıştır (Harita 3). Batıda Kocaeli'ye, doğuda Giresun'a kadar yayılmış olan bu vektörün 5-7 yıl içinde Orta Anadolu'ya kadar yayılacağı

MUTLU SON

- 46 yaşında erkek hasta
- Halsizlik,karın sağ üst kadranda ağrısı var
- 6 aydır bu yakınmalarının olduğunu ifade ediyor.
- Kronik B hücreli lenfositik lösemi tanısı ile rituximab,pentostatin ve siklofosfamid tedavisi verilmiş
- Halen rituximab alıyor
- Fizik muayenede büyük aksiller lenf bezleri saptanıyor.
- 7 aydır transaminazlarında giderek artan yükselme var

Ayırıcı tanı

- Karın ultrasonografisi, lenf bezi biyopsisi tanısal değil
- Otoimmün hepatit
- Metabolik karaciğer hastalığı
- Viral Hepatit
- HSV araştırılıyor

- Anti HEV pozitif
- HEV RNA yüksek titre
- Sekanslama ve filogenetik analizde hepatitis E virus genotype 3c
- Bu genotip Avrupadaki insan ve domuz izolatları ile homolog
- Yerli HEV infeksiyonu olarak kabul ediliyor.

Case presentation

A 46-year-old Caucasian man who worked as a mechanic was transferred to the gastroenterology out-patient clinic

the time of referral to our department, the patient was in stable partial remission and B symptoms were absent. He had no history of recent travels to countries outside

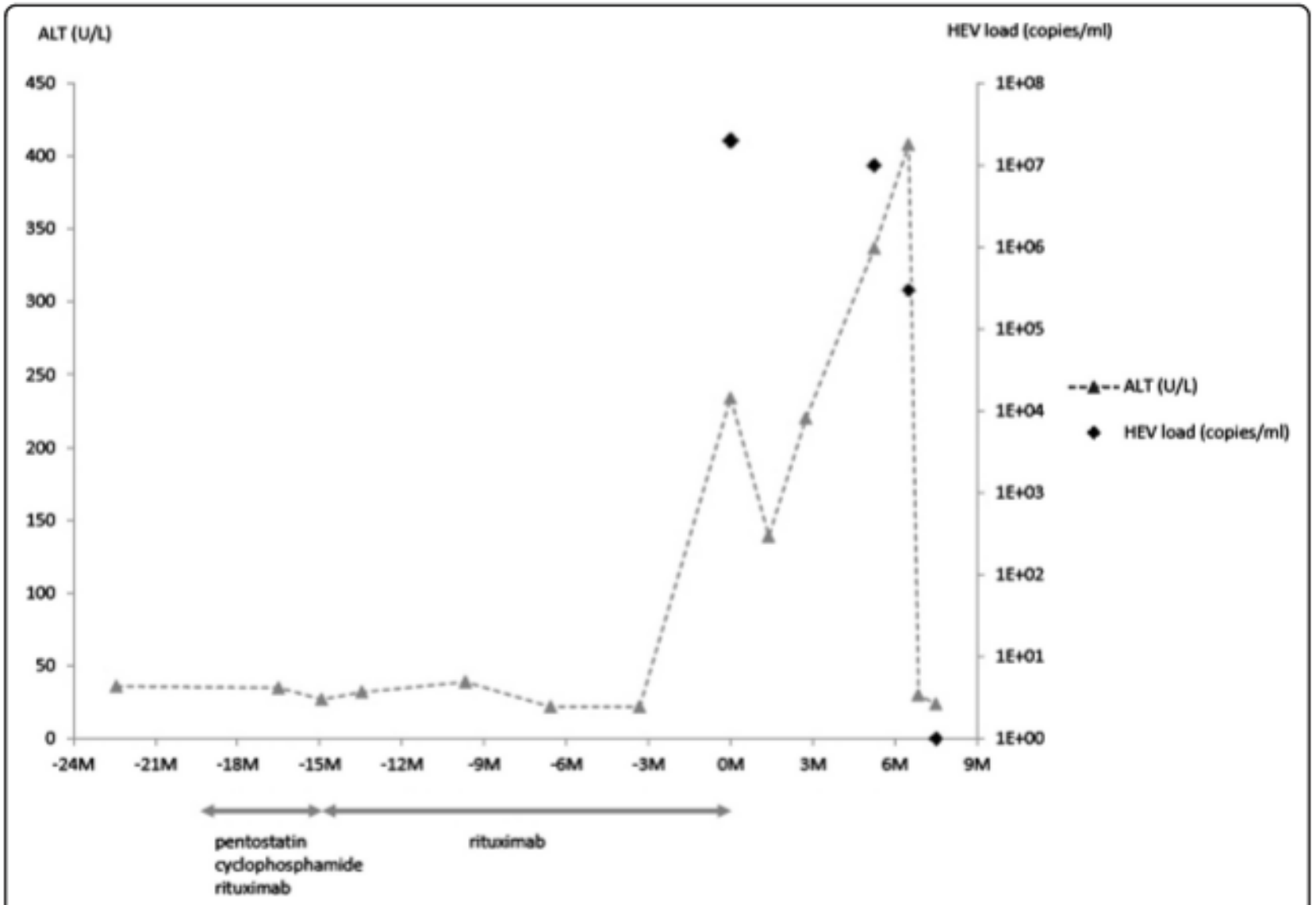


Figure 1 Course of alanine transaminase and hepatitis E virus ribonucleic acid (HEV RNA) levels in the patient's blood related to time indicated in months (M). Intervals and types of chronic lymphocytic leukemia therapy are shown. The time scale on the x-axis is related to time point "0 M", when elevated transaminase concentrations were measured for the first time. This was also the time point at which rituximab was

- İmmünsüpresyon altında hepatit E pozitifliğinin devam etmesi
- Rituximab tedavisi kesildikten sonra HEV RNA negatifleşiyor
- ALT normal sınırlara geriliyor

- Genotip 3 HEV infeksiyonlarında kronikleşme potansiyeli yüksek
- Serumda ve dışkıda 6 aydan uzun süren HEV RNA pozitifliği ile kronik HEV infeksiyonu tanısı konulur.
- Öncelikle immünsüpresif tedavinin azaltılması düşünülmelidir, birlikte antiviral tedavi de başlanabilir.
- Zoonotik potansiyeli olan genotip 3 Avrupa' da görülüyor.
- Hayvan teması ve az pişmiş etler (özellikle domuz)aracılığı ile bulaşıyor

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CASE REPORT Open Access

Chronic hepatitis E virus infection in a patient with leukemia and elevated transaminases: a case report

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Abstract

Introduction: Acute hepatitis E virus infection may cause mild, self-limiting hepatitis, either as epidemic outbreaks or sporadic cases, the latter of which have been reported in industrialized countries. Chronic infections are uncommon and have been reported in immunosuppressed patients, patients with human immunodeficiency virus infection, and patients with hematological malignancies.

Case presentation: A 46-year-old Caucasian man was admitted to the gastroenterology clinic with a history of increasing transaminases, persistent exhaustion, and occasional right-side abdominal pain over the course of a 6-month period. B-cell chronic lymphocytic leukemia had been diagnosed several years earlier, and the patient was treated with rituximab, pentostatin, and cyclophosphamide. A diagnostic workup ruled out autoimmune and metabolic liver disease, hepatitis A-C, and herpes virus infection. A physical examination revealed enlarged axillary lymph nodes. The results of an abdominal ultrasound examination were otherwise unremarkable. Hepatitis E virus infection was diagnosed by detection of hepatitis E virus-specific antibodies. Blood samples were positive for