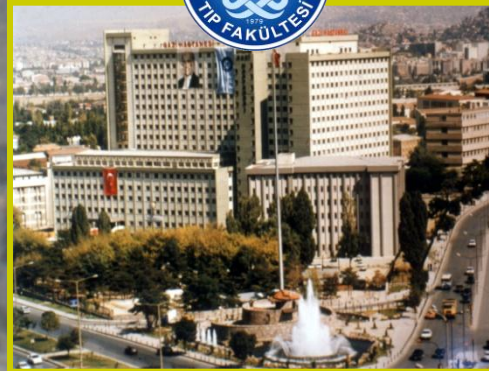
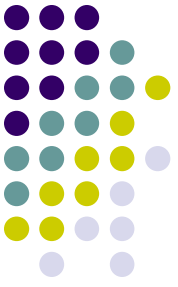


AKILCI AŐI UYGULAMALARI

Prof Dr. Esin ŐENOL

Uzm. Hemő. Fatma ŐZER



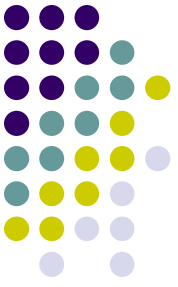


GAZİ ÜNİVERSİTESİ TIP FAKÜLTESİ
ERİŞKİN BAĞIŞIKLAMA MERKEZİ-
(1994-)
ERİŞKİN AŞI MERKEZİ-2010

PROF.DR.FİRDEVŞ AKTAŞ
PROF.DR.KENAN HİZEL
UZM.HEM.ZELİHA HALICI



Sağlık Çalışanları Aşılaması



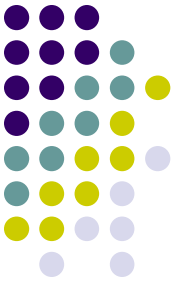
İnfeksiyon Riski Değerlendirmesi Yaptırınız...

- Duyarlı olduğunuz infeksiyonları saptayınız.
- Aşılama yaptırınız.
- Sağlık Çalışanları İnfeksiyon Kontrol Polikliniği

Tel: 5431

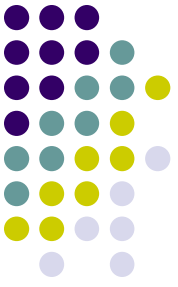
**İyi Yapılandırılmış Sağlık
Çalışanları Polikliniği**





**YENİ İŞE BAŞLAYANA AŞI KARTI
HEDİYE ET!**

Aşı Merkezi



- **Kayıt formları**
- **Aşılar ile ilgili genel bilgiler**
- **Aşı kontrendikasyonu ve yan etkiler ile ilgili bilgiler**
- **Aşılama öncesi sorulacak sorular**

Immunization Programs for Infants, Children, Adolescents, and Adults: Clinical Practice Guidelines by the Infectious Diseases Society of America

Larry K. Pickering,¹ Carol J. Baker, Gary L. Freed, Stanley A. Gall, Stanley E. Grogg, Gregory A. Poland, Lance E. Rodewald, William Schaffner, Patricia Stinchfield, Litjen Tan, Richard K. Zimmerman, and Walter A. Orenstein

Clinical Infectious Diseases 2009;49:817–40

Bone Marrow Transplantation (2009) 44, 521–526
© 2009 Macmillan Publishers Limited All rights reserved 0268-3369/09 \$32.00
www.nature.com/bmt

GUIDELINES

Vaccination of hematopoietic cell transplant recipients

P Ljungman¹, C Cordonnier², H Einsele³, J Englund⁴, CM Machado⁵, J Storek⁶ and T Small⁷

CLINICAL GUIDELINES

Annals of Internal Medicine

Recommended Adult Immunization Schedule: United States, 2010*

Advisory Committee on Immunization Practices†

2014 Recommended Immunizations for Adults: By Age

If you are this age, talk to your healthcare professional about these vaccines

	Flu Influenza	Td/Tdap Tetanus, diphtheria, pertussis	Shingles Zoster	Pneumococcal		Meningococcal	MMR Measles, mumps, rubella	HPV Human papillomavirus		Chickenpox Varicella	Hepatitis A	Hepatitis B	Hib Haemophilus influenzae type b
				PCV13	PPSV23			for women	for men				
19 - 21 years									3 doses				
22 - 26 years							1 or 2 doses	3 doses	3 doses				
27 - 49 years		1 dose of Tdap*		1 dose	1 or 2 doses	1 or more doses							
50 - 59 years	Flu vaccine every year	Td booster every 10 years								2 doses	2 doses	3 doses	1 or 3 doses
60 - 64 years			1 dose										
65+ year				1 dose	1 dose								

More Information:

There are several flu vaccines available. Talk to your healthcare professional about which flu vaccine is right for you.

* If you are pregnant, you should get a Tdap vaccine during the 3rd trimester of every pregnancy to help protect your babies from pertussis (whooping cough).

You should get zoster vaccine even if you've had shingles before.

There are two different types of pneumococcal vaccine: PCV13 (conjugate) and PPSV23 (polysaccharide). Talk with your healthcare professional to find out if one or both pneumococcal vaccines are recommended for you.

Your healthcare professional will let you know how many doses you need.

Recommended for you if you did not get it when you were a child.

If you were born in 1967 or after, and don't have a record of being vaccinated or having had measles, mumps and rubella, talk to your healthcare professional about how many doses you may need.

There are two HPV vaccines but only one HPV vaccine (Gardasil®) should be given to men.

If you are a male 22 through 26 years old and have sex with men you should complete the HPV vaccine series if you have not already done so.

Your healthcare professional will let you know how many doses you need.

Recommended For You: This vaccine is recommended for you *unless* your healthcare professional tells you that you cannot safely receive it or that you do not need it.

May Be Recommended For You: This vaccine is recommended for you if you have certain risk factors due to your health, job, or lifestyle that are not listed here. Talk to your healthcare professional to see if you need this vaccine.

If you are traveling outside the United States, you may need additional vaccines.

Ask your healthcare professional about which vaccines you may need at least 6 weeks prior to your travel.

For more information, call 1-800-CDC-INFO (1-800-232-4636) or visit www.cdc.gov/vaccines



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

2014 Recommended Immunizations for Adults: By Health Condition

If you have this health condition, talk to your healthcare professional about these vaccines

	Flu <i>Influenza</i>	Td/Tdap Tetanus, diphtheria, pertussis	Shingles <i>Zoster</i>	Pneumococcal		Meningococcal	MMR Measles, mumps, rubella	HPV <i>Human papillomavirus</i>		Chickenpox <i>Varicella</i>	Hepatitis A	Hepatitis B	Hib <i>Haemophilus influenzae type b</i>
				PCV13	PPSV23			for women	for men				
Pregnancy		*see below			1 - 2 doses								
Weakened Immune System			SHOULD NOT GET VACCINE				SHOULD NOT GET VACCINE		3 doses before age 26 years	SHOULD NOT GET VACCINE		3 doses	post-HSCT* recipients only
HIV: CD4 count less than 200						1 or more doses							
HIV: CD4 count 200 or greater		1 dose of Tdap		1 dose							2 doses	3 doses	1 or 3 doses
Kidney disease or poor kidney function	Flu vaccine every year	followed by Td booster every 10 years			1 - 2 doses			3 doses before age 26 years	3 doses before age 21 years	2 doses			
Asplenia (if you do not have a spleen or if it does not work well)			1 dose for those 60 years or older			1 or more doses	1 or 2 doses					3 doses	1 or 3 doses
Heart disease Chronic lung disease Chronic alcoholism													1 or 3 doses
Diabetes (Type 1 or Type 2)				1 dose		1 or more doses						3 doses	
Chronic Liver Disease											2 doses		

More Information:

There are several flu vaccines available. Talk to your healthcare professional about which flu vaccine is right for you.

* If you are pregnant, you should get a Tdap vaccine during the 3rd trimester of every pregnancy to help protect your babies from pertussis (whooping cough).

You should get zoster vaccine even if you've had shingles before.

There are two different types of pneumococcal vaccine: PCV13 (conjugate) and PPSV23 (polysaccharide). Talk with your healthcare professional to find out if one or both pneumococcal vaccines are recommended for you.

Your healthcare professional will let you know how many doses you need.

If you were born in 1957 or after, and don't have a record of being vaccinated or having had measles, mumps and rubella, talk to your healthcare professional about how many doses you may need.

There are two HPV vaccines but only one HPV vaccine (Gardasil®) should be given to men. If you are a male 22 through 26 years old and have sex with men you should complete the HPV vaccine series if you have not already done so.

Recommended for you if you did not get it when you were a child.

Your healthcare professional will let you know how many doses you need.

*Hematopoietic stem cell transplant

Recommended For You: This vaccine is recommended for you **unless** your healthcare professional tells you that you cannot safely receive it or that you do not need it.

May Be Recommended For You: This vaccine is recommended for you if you have certain other risk factors due to your age, health, job, or lifestyle that are not listed here. Talk to your healthcare professional to see if you need this vaccine.

YOU SHOULD NOT GET THIS VACCINE

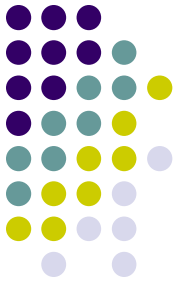
If you are traveling outside the United States, you may need additional vaccines.

Ask your healthcare professional about which vaccines you may need at least 6 weeks prior to your travel.

For more information, call 1-800-CDC-INFO (1-800-232-4636) or visit www.cdc.gov/vaccines



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



Immunization of Health-Care Personnel

Recommendations of the Advisory Committee on Immunization Practices (ACIP)



Continuing Education Examination available at <http://www.cdc.gov/mmwr/cme/conted.html>.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

2013 IDSA Clinical Practice Guideline for Vaccination of the Immunocompromised Host

Lorry G. Rubin,¹ Myron J. Levin,² Per Ljungman,^{3,4} E. Graham Davies,⁵ Robin Avery,⁶ Marcie Tomblyn,⁷ Athos Bousvaros,⁸ Shireesha Dhanireddy,⁹ Lillian Sung,¹⁰ Harry Keyserling,¹¹ and Insoo Kang¹²

- KİM SORUMLU?
- NE ZAMAN?
 - İMMUNSUPRESYONDAN ÖNCE
 - İNAKTİF AŞILAR ≥ 2 , CANLI AŞILAR ≥ 4 HAFTA
- AİLE/YAKINLARININ AŞILANMASI
- SEYAHAT



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Contents lists available at ScienceDirect

Vaccine

journal homepage: www.elsevier.com/locate/vaccine

Conference report

ARTICLE INFO

Keywords:

Graft versus host disease
Haematopoietic stem cell transplantation
Immune response
Infection
Vaccination

ABSTRACT

Patients lose protective immunity to vaccine-preventable diseases after haematopoietic stem cell transplantation (HSCT). Therefore, revaccination of HSCT recipients represents an important strategy for reducing morbidity and mortality associated with these infections. Since there is little consensus on vaccine recommendations and practices for allogeneic HSCT recipients with active chronic graft-versus-host disease (GVHD) the *German–Austrian–Swiss–Consensus Conference on Clinical Practice in Chronic GVHD* developed an immunization schedule with the aim to provide optimal patient care. The proposed vaccine recommendations include immunization against *Haemophilus influenzae type b*, pertussis, pneumococci, meningococci, tetanus, diphtheria, hepatitis A and B, measles, mumps and rubella, influenza, poliomyelitis, varicella virus, and tick-borne encephalitis with a particular focus on chronic GVHD.

and blood stem cell transplantation (Päd-AG-KBT) were incorporated. They are the basis to universally recommend 6 months after transplantation as the appropriate time to start vaccination and a booster at 18 months, although differences in efficacy between children and adults have not been formally addressed. The main differences of the presented recommendations for pediatric and adult allogeneic HSCT recipients compared to the recently published guidelines [3–5,7] are (1) the emphasis on GVHD, (2) separate recommendations for children, adolescents and adults, (3) a more comprehensive discussion of hepatitis B, (4) a comment on HPV vaccine and, most importantly, (5) easy to follow and convenient practical vaccination schedule (Fig. 1 and Tables 3 and 4).

G.Ü.T.F. KHN BAĞIŞIKLAMA ŞEMASI

KÖK HÜCRE NAKİL ÜNİTESİ ERİŞKİN AŞILAMA ŞEMASI (AŞILAMAYA 12 AY ÖNCE BAŞLANABİLEN HASTALARDA)^{1,9}

Aşı	≥6 ay ¹	≥8 ay	≥10 ay	≥12 ay	≥14 ay	≥16 ay	≥18 ay	≥24 ay	≥60 ay	Aşılar arası en az süre
İnfluenza (inaktif)(Eylül- Mart)	Flu									
H. influenza tip B	HiB	HiB	HiB	Titreye bakılması				Titreye bakılması		1 ay
Meningokok (Menactra, MCV4)	MCV4									
Konjuge pnömokok (Pevnar 13)	PCV13	PCV13	PCV13	Titreye bakılması				Titreye bakılması		1- 2 ay
Polisakkarid pnömokok (Pneumovax) ²				PPV23 ²						Pevnardan 2 ay sonra
Polio inaktif				IPV	IPV	IPV				
Hepatit A ⁵				HAV			HAV			6 ay
Hepatit B ⁵				HBV	HBV		HBV	Titreye ⁶ bakılması		2 ay
HPV (Gardasil) 9- 26 yaş				HPV	HPV		HPV			1. dozdan 2 ay sonra; 2. dozdan 4 ay sonra
Asellüler pertussis- tetanoz- difteri ⁵								Titreye bakılması		
Non-Cord Blood Transplant (Tdap)				Tdap						1- 2 ay
Non-Cord Blood Transplant (Td)					Td	Td				1- 2 ay
Cord-blood Transplant (Tdap)				Tdap	Tdap ³	Td ³				1- 2 ay
Kızamık- Kabakulak- Kızamıkçık (MMR) "2- 1- 5 kuralı" ⁷	Nakilden en az 2 yıl sonraya kadar canlı aşı yapılmıyor. Sonrasında da sadece sol kolonda yer alan kriterlere uygun olan hastalara yapılıyor							MMR ⁷		
Varicella zoster (Varivax)								VZV ⁷		
Sadece seronegatif ve "2- 1- 5 kuralı" ⁷										2. Doz 1 ay sonra ⁴
İlk doz MMR ile birlikte verilebilir										
Yüksek titrede varicella zoster (Zostavax)									Zostavax ⁸	
Sadece seropozitif ve sadece > 60 yaş, "5- 1- 5 kuralı" ⁸										

ERİŞKİN AŞILAMA

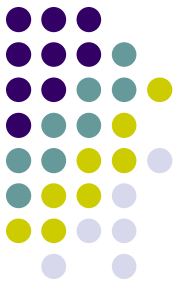
El Kitabı

EDİTÖR

Prof. Dr. Esin ŞENOL

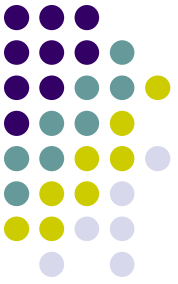


Aşı Yapmadan Önce Sorulacak Sorular



- Hasta mısınız; ateşiniz var mı?
- Bilinen gıda, ilaç, aşı allerjiniz var mı?
- Geçmişte herhangi bir aşı uygulamasında ciddi bir reaksiyon oldu mu?
- **Nöbet, beyin veya sinir sistemi problemi?**
- Kanser, AIDS, 2 haftadan uzun sistemik kortikosteroid kullanımı
(2mg/kg/gün ya da 20 mg'dan fazla prednizon)

Aşı Kayıt

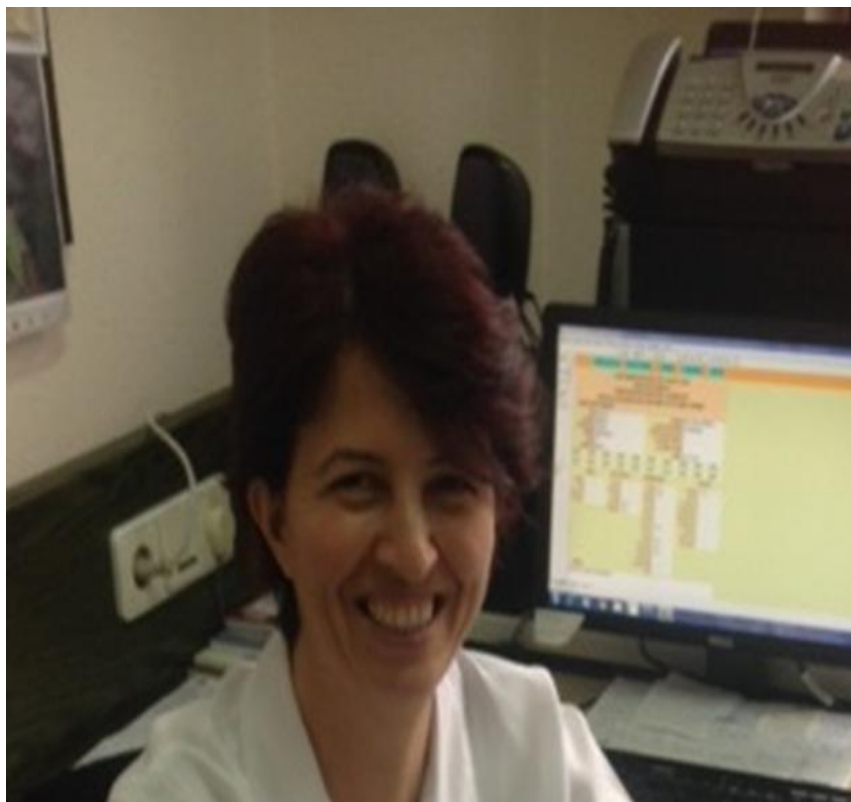


- **İsim**
- **Doğum tarihi**
- **Aşılama tarihi**
- **Aşı adı**
- **Firma adı / Seri no**
- **Aşı uygulama yeri**
- **Aşılama yolu**
- **Aşığı yapan - İsim / Adres / Tel. No**
- **İmzalanmış onam formu**

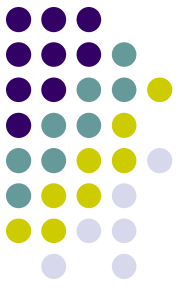
KAYIT SİSTEMİ İLİŞKİLİ EKLEMELER?







SORU -1: KİM SORUMLU ?



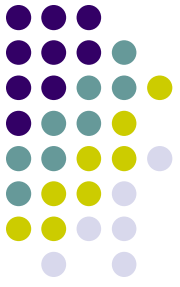
- **Yüksek riskli bir SP-3 doz Hepatit B-Aşılama sonrası seronegatif çıkmış**
- **Aşı yanıtızsız denilerek bırakılmış**
- **Bizim merkezimizde çalışırken akut hepatit B, önemli psikolojik sorunlar, kronik hepatit-tedaviler**

- Aşı programını yarım bırakmış sağlık personeli
- Aşı sonrası serolojik kontrol?



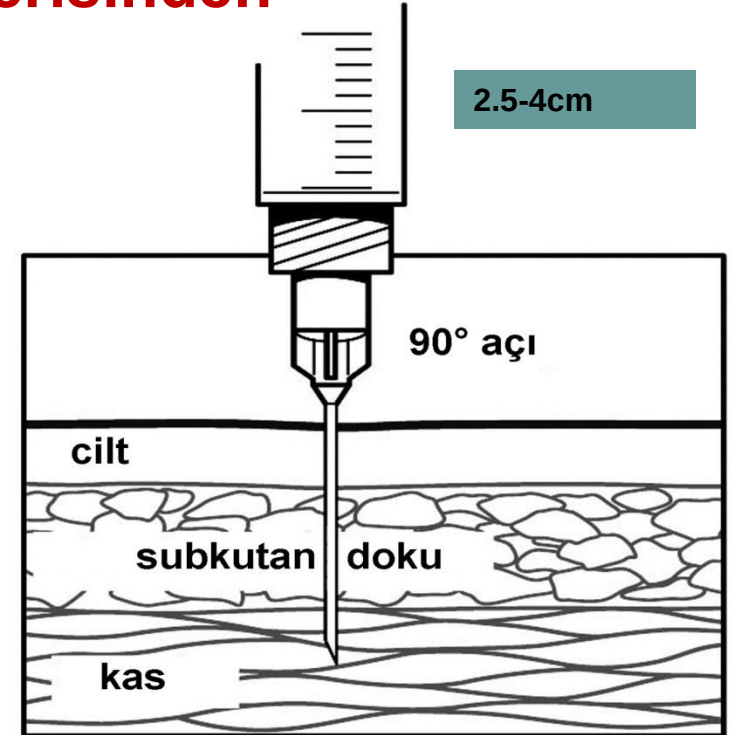
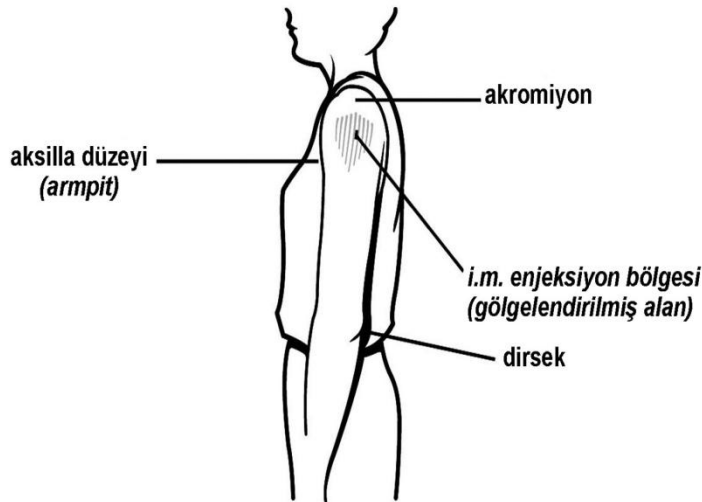
EKSİK AŞILAMA YETERSİZ BİLGİLENDİRME

Hepatit B

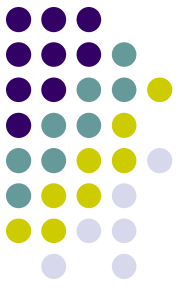


- Anti-HBs ≥ 10 mIU/ml
- Son dozdan 1-2 ay sonra Antikor kontrolü
- Son dozdan >6 ay, kontrol yapılmaz

YANITSIZLIK: İki tam aşılama serisinden sonra anti-HBs negatifliği, durumunda 3. seri önerilmiyor

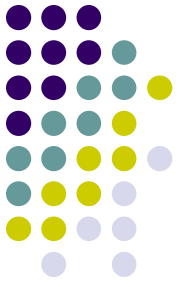


Soru-1 deki Örnek İçin-DOĞRU YAKLAŞIM



- 3 dozdan 1-2 ay sonra (-) olanlar da, 2.seri, hala (-)se CEVAPSIZ
- HBsAg BAK- Kr.HBV olabilir
- HBsAg(-) ise; AŞI CEVAPSIZLAR DUYARLI KABUL EDİLİR
- RİSKLİ TEMASLARDA –HBIGX2 veya **HBIGx1+AŞILAMA**- PROFİLAKSİ

YOĞUN GİRİŞİMSEL İŞLEMLER YAPAN SP-AŞILI



- **YILLAR SONRA BİR GÜN ANTİKOR
BAKTIRAYIM DİYOR**

A. AŞI SONRASI ANTİKOR (+)
B. AŞILANMA SONRASI CEVAP
BAKILMAMIŞ/HATIRLAMİYOR

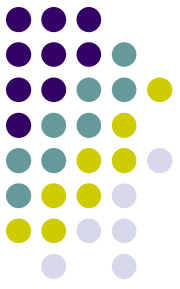
- **Anti-HBs<10mIU/ml- NE YAPALIM?**

CEVAP:HIÇBİRŞEY



- AŞILAMA SONRASI(1-2 AY) BAKILMIŞ VE>10mIU/ML-SORUN YOK-DÜZEYLER ZAMANLA DÜŞEBİLİR AMA «BAĞIŞIKLIK BELLEĞİ»
- RAPEL VE PERİYODİK TARAMA YAPILMAMALI
- AŞILAMA SONRASI ERKEN DÖNEM BİLGİSİ YOK-RİSKLİ TEMASTA -Anti-HBs bakılır
- Anti-HBs<10mIU/mL- HBIG+ 1 doz aşı

KİMLER PERİYODİK TARANMALI? AŞILAMA SONRASI TEST?AŞILAMA ÖNCESİ TEST?

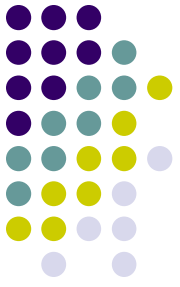


YANIT SORUNU
OLABİLECEKLER:HEMODİYALİZ,HIV

PREVALANS $\geq$ %30

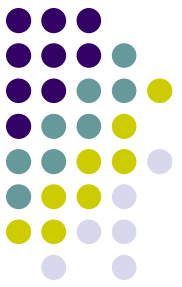
- KAN VE VÜCUT SIVILARI İLE TEMAS ETME RİSKİ YÜKSEK SP
- HBsAg(+) ANNE BEBEKLERİ
- HBsAg(+) KİŞİ CİNSEL PARTNER
- YANIT SORUNU OLABİLECEKLER

AŞILAMADA SIK YAPILAN HATALAR!

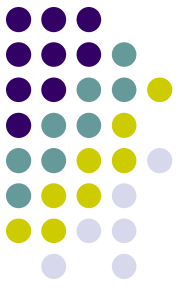


- KAYITLARIN SAKLANMAMASI
- SAĞLIK PERSONELİ LÜTFEN KAYITLARINIZI SAKLAYINIZ
- **YILLAR ÖNCE HEPATİT B AŞISI YAPTIRDIĞINI ANIMSAYAN-DÖKÜMENTE OLMAYAN SAĞLIK PERSONELİ-YENİDEN AŞILAMA GEREKİR-TEK DOZ AŞI SONRA TEST YAKLAŞIMI SÜRDÜLEBİLİR CEVAP İÇİN ÖNERİLMEMEKTEDİR**
- MAALİYET,EMEK

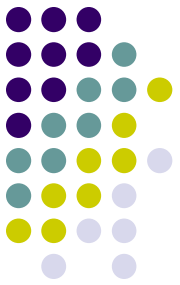




SORU-2



- TIP FAK.ÖĞRENCİ- HEPATİT B AŞISI YAPILDI, 1-2 sn. SONRA BAYILDI,DUVARDAKİ TAHTAYA KAFASINI ÇARPTI.KISA SÜRELİ, KASILMALARLA SEYREDEN NÖBET.BİLİNÇ BULANIKLIĞI Θ
- EPİLEPTİK OLDUĞU ÖĞRENİLDİ
- SONRAKİ DOZLAR- NÖROLOJİ ONAYI?
- **Nöbet, beyin veya sinir sistemi problemi?**



ITALIAN LEAGUE (LICE) 2013

Epilepsy and vaccinations: Italian guidelines

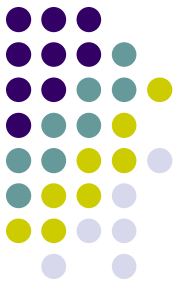
***Dario Pruna, †Paolo Balestri, ‡Nelia Zamponi, †Salvatore Grosso, §Giuseppe Gobbi,
¶Antonino Romeo, **Emilio Franzoni, ††Maria Osti, ‡‡Giuseppe Capovilla,
§§Riccardo Longhi. and ¶¶Alberto Verrotti**

ÖNERİLER;

- ✓ Aşılar febril olmayan nöbet ve epilepsiye yol açmaz
- ✓ İdiopatik veya semptomatik epilepsisi olanlarda aşı yan etkileri için risk yoktur
- ✓ Epilepsi veya epileptik ansefolapati aşı kontrendikasyonu değildir-STABİL NÖROLOJİK DURUMLAR
- ✓ DTP ve MMR aşıları- febril nöbet riski vardır.
- ✓ Nörolojik bulguları ilerleyen ya da aktif olanda nörolojik durum stabilize olana kadar aşı ertelenmelidir.



AŞILAMA SONRASI GELİŞEN HER TÜRLÜ YAN ETKİ; TESADÜFİ YA DA GERÇEK OLABİLİR.



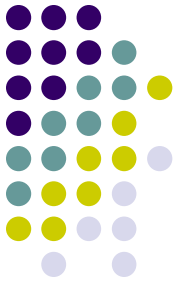
- **Lokal:** Enjeksiyon Yerinde Ağrı, Şişlik, Kızarıklık

Genellikle hafif ve kendiliğinden düzelir.

- **Sistemik:** Canlı aşılardan sonra-bir kuluçka dönemi; 1-3 hafta sonra gelişir.
- **Allerjik:** Nadir, aşıdaki bir bileşene karşı

TARAMA (SORGULAMA) İLE RİSK MİNİMUMA İNDİRİLİR.

AŞILAMA-YAN ETKİLER



Aşılamaya sonrası, yaşamsal önem taşıyan **anafilaksi türü acil reaksiyon nadir olup, milyonda bir** olarak bildirilmektedir. Aşılamayı izleyen **dakikalar içinde** ortaya çıkması beklenir. Anafilaksi bulgularına karşı önlemler (ek, **anafilaksi durumunda müdahale**) kolay ulaşılabilir ve uygulanabilir durumda olmalıdır.

Adölesan ve erişkinlerde anafilaksiden daha sık karşılaşılan bir reaksiyon ise **vazovagal refleksdir. Aşılamayı izleyen 5-15 dakika içinde** gelişmektedir. İğne fobisi olanlarda daha sık karşılaşılmaktadır. Senkopa bağlı düşmenin yarattığı istenilmeyen kazalar olabilir. Aşılamaya sonrası, baş dönmesi, göz karması gibi bulguları olan hastaların hemen uygun pozisyona getirilerek dinlendirilmeleri önemlidir.

İLK 5-15 dk.AŞILAMA yeri terkedilmemeli



Aşı için kesin kontrendikasyonlar

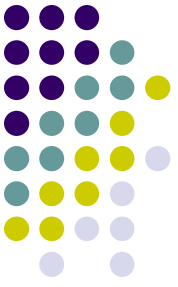
- ✓ Aşı bileşimindeki bir maddeye allerji veya bir önceki dozu izleyen ciddi allerjik reaksiyon

ÖNEMLİ NOT! MMR AŞISI YUMURTA ALLERJİSİ OLANLARA YAPILABİLİR

- ✓ Boğmaca aşısından 7 gün sonra başka nedenle açıklanamayan ansefalopati
- ✓ Gebelik ve bağışıklık sistemi baskılanmış olanlarda canlı aşılar

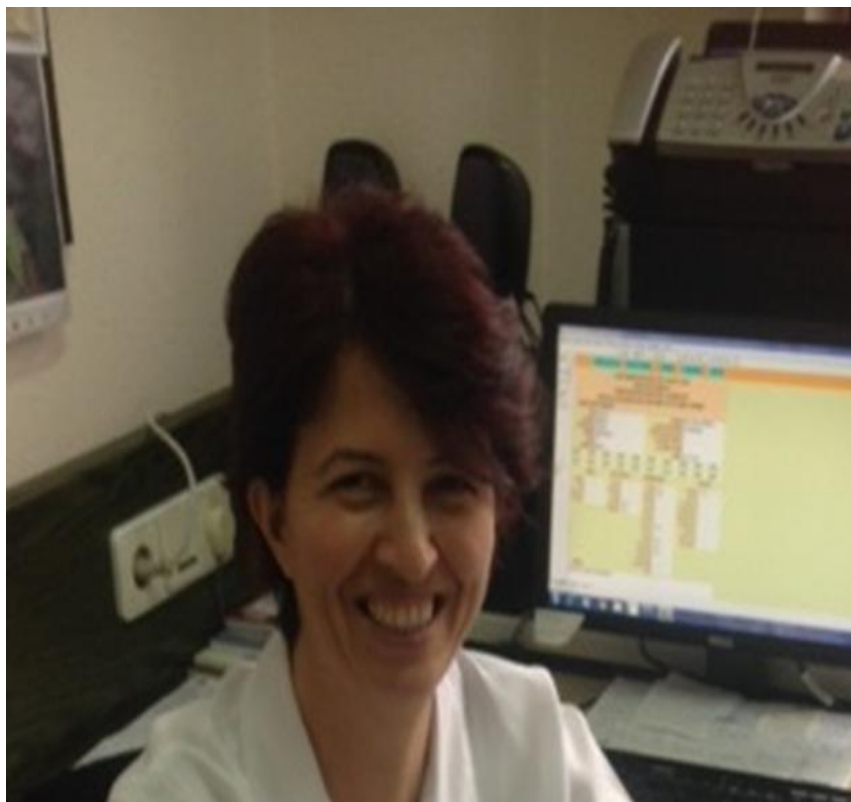
Lateks, neomisin, streptomisin, polimiksin sorulmalı

Bu hastadan ne öğrendik?

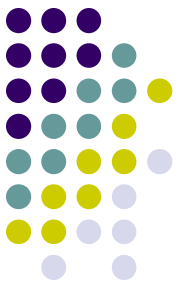


- AŞI YAPILMASINA ENGEL DURUM DÜŞÜNDÜĞÜMÜZDEN ÇOK AZDIR
- AKUT İYİ OLMAYAN BİREYDE AŞI YAPILMASI ERTELENEBİLİR- AŞI İLİŞKİLİ YE YANLIŞ YORUMLARINI ÖNLEMEK İÇİN





Soru-3: Dermatoloji ve Romatoloji İmmunsupresif(Biyolojik Tedaviler) Kullanılan Hastalar?



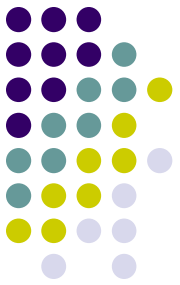
Immunomodulating agents

Corticosteroids
Methotrexate
Sulfasalazine
Leflunomide
Hydroxychloroquine
Azathioprine
Mycophenolic acid preparations
Cyclosporine
Tacrolimus
Cyclophosphamide
Biologicals:
TNF α blocking agents:
 Infliximab
 Etanercept
 Adalimumab
Rituximab
Tocilizumab
Abatacept
Anakinra

RA

IBD

PSÖRİAZİS





Drug class	Drug	Immunosuppressive effect [20]	Remarks
NSAIDs		—	
Corticosteroids		+	Immunosuppressive dose: >20 mg/day of prednisone or equivalent for >2 weeks [97] Not immunosuppressive doses: <10 mg/day or cumulative doses <500 mg [21]
DMARDs	SSZ; 5-ASA	—	Immunomodulator in arthritis and IBD
	Gold salts	—	Anti-inflammatory mechanism unclear [98]
	HCO	—	Blocks Toll-like receptor on dendritic cells
	Cyclophosphamide	+	Alkylating agent
	MTX	+	Anti-metabolite, folate antagonist, immunomodulator
	LEF	+	Anti-proliferative agent, inhibits pyrimidine synthesis
	AZA	+	Anti-proliferative agent, purine synthesis inhibitor
Anti-psoriatic drugs	Ciclosporin	+	Calcineurin inhibitor, transplant-related immunosuppressive drug
	Acitretin	—	Second-generation retinoid
	Euminate	—	Anti-inflammatory and anti-proliferative action
Anti-TNF- α agents	Adalimumab	+	Chimaeric monoclonal anti-TNF antibody
	Etanercept	+	Human monoclonal anti-TNF antibody
	Certolizumab	+	TNF receptor-immunoglobulin G fusion protein
	Certolizumab	+	PEGylated Fab fragment of a humanized anti-TNF monoclonal antibody
Other biologicals	Golimumab	+	Human monoclonal anti-TNF antibody
	Anakinra	+	IL-1 receptor antagonist, blocks IL-1 signalling
	Rituximab	+	Anti-CD-20, reduces B-cell number
	Abatacept	+	Anti-CTLA4, blocks T-cell co-stimulation
	Tocilizumab	+	Anti-IL-6 receptor
	Alefacept	+	LFA-3 immunoglobulin G fusion protein, binds to CD2, reduces T cells number
	Efalizumab	+	Anti-CD-11, blocks leucocyte adhesion and T-cell activation
	Ustekinumab	+	Anti-p40 subunit of IL-12 and IL-23

İMMUNOTERAPİ ALAN
IMİD=İMMUNSUPRESİF



Contents lists available at ScienceDirect

Autoimmunity Reviews

journal homepage: www.elsevier.com/locate/autrev



Vaccination in adult patients with auto-immune inflammatory rheumatic diseases: A systematic literature review for the European League Against Rheumatism evidence-based recommendations for vaccination in adult patients with auto-immune inflammatory rheumatic diseases

S. van Assen ^{a,*}, O. Elkayam ^{b,c}, N. Agmon-Levin ^d, R. Cervera ^e, M.F. Doran ^f, M. Dougados ^g, P. Emery ^h, P. Geborek ⁱ, J.P.A. Ioannidis ^{j,k,l,m}, D.R.W. Jayne ⁿ, C.G.M. Kallenberg ^o, U. Müller-Ladner ^p, Y. Shoenfeld ^{c,d}, L. Stojanovich ^q, G. Valesini ^r, N.M. Wulffraat ^s, M. Bijl ^o

Rheumatology 2010;49:1815–1827

doi:10.1093/rheumatology/keq183

Advance Access publication 29 June 2010

RHEUMATOLOGY

Review

Vaccinations in patients with immune-mediated inflammatory diseases

Jean-François Rahier¹, Michel Moutschen², Alfons Van Gompel³, Marc Van Ranst⁴, Edouard Louis⁵, Siegfried Segaeert⁶, Pierre Masson⁷ and Filip De Keyser⁸

Autoimmunity Reviews 11 (2012) 572–576



Contents lists available at SciVerse ScienceDirect

Autoimmunity Reviews

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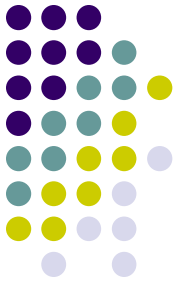


Review

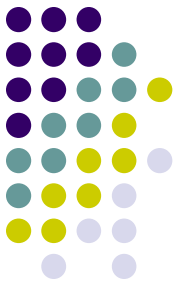
Vaccination of patients with auto-immune inflammatory rheumatic diseases requires careful benefit-risk assessment

M. Bijl ^{a,*}, N. Agmon-Levin ^b, J.-M. Dayer ^{c,d}, E. Israeli ^a, M. Gatto ^d, Y. Shoenfeld ^{b,e}

GENEL OLARAK-IMID/AIIRD



- **2mg/kg/gün-1 hafta veya 1mg/kg/gün-1 ay KS-CANLI AŞILARI YAPMA –TEDAVİ SONLANDIRILDIKTAN 3 AY SONRA**
- **DİĞER İMMUNSUPRESİFLER-TEDAVİ KESİLDİKTEN 6 AY SONRA CANLI AŞILAR**
- **IFN –CANLI AŞILAR YAPILABİLİR**
- **İNAKTİF AŞILAR-TEDAVİ BAŞLAMADAN 2 HAFTA ÖNCE BAŞLANIRSA İYİ OLUR,EMNİYETLİ, ETKİLİ**
- **AŞILAR-OTOİMMUN HASTALIKLARDA BULGULARI ALEVLENDİRMEZ**
- **TEDAVİ BAŞLAMADAN AŞI PLANLAMASI**



- ✓ BU GRUP –AŞI İLE ÖNLENİLEBİLİR HASTALIK RİSKİ ARTMIŞ
- ✓ AŞI ETKİNLİĞİ?
- ✓ EMNİYETİ?
- ✓ HASTALIK ALEVLENMESİ?

OTOİMMUNİTE İLE OTOİMMUN HASTALIK FARKI ?

OTOİMMUNİTE: Genetik + çevresel faktörler = OTOANTİKORLAR / OTOREAKTİF T-HÜCRELER - İMİD DÖNÜŞMEZ



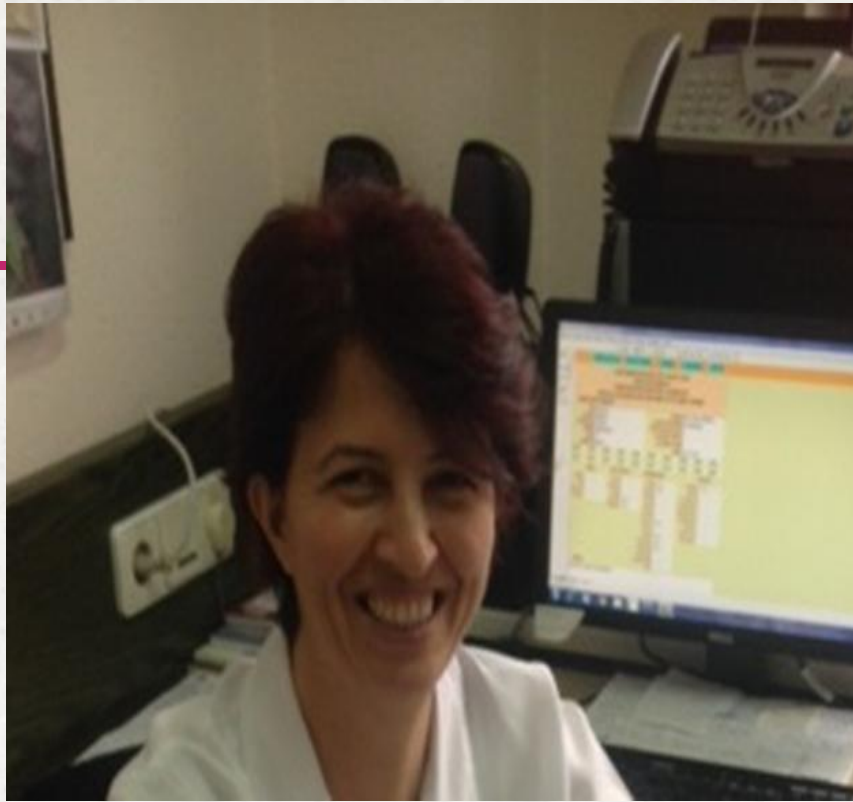
Review

Vaccination of patients with auto-immune inflammatory rheumatic diseases requires careful benefit-risk assessment

M. Bijl ^{a,*}, N. Agmon-Levin ^b, J.-M. Dayer ^{c,d}, E. Israeli ^a, M. Gatto ^d, Y. Shoenfeld ^{b,e}

- ✓ AŞILAMALAR HASTALIK STABİLKEN VE TEDAVİ BAŞLAMADAN PLANLANMALI VE YAPILMALI
- ✓ İNFLUENZA VE PNÖMOKOK AŞILARI KUVVETLE ÖNERİLİR
- ✓ CANLI AŞILAR YAPILMAMALI
- ✓ İNAKTİF AŞILAR, RİTUXİMAB HARIÇ, TEDAVİ SIRASINDA DA YAPILABİLİR







SORU-4:ERİŞKİN TETANOZ BAĞIŞIKLAMA PROGRAMI?

20 yaş, tıp öğrencisi,
Aile hekimi çağırmış
Tetanoz bağışıklaması programına
alınmış
1.doz aşı sonrası bize başvuruyor:
NASIL DEVAM EDEYİM?



T.C.
SAĞLIK BAKANLIĞI
Temel Sağlık Hizmetleri Genel Müdürlüğü

Sayı : B100TSH0110005
Konu : Genişletilmiş Bağışıklama
Programı Genelgesi

13.03.2009/7941

GENELGE
2009/17

3- Doğurganlık Çağı Kadın/Gebe Aşılamaları

Doğurganlık Çağı (15- 49 Yaş) /

Doz sayısı	Uygulama zamanı
Td 1	Gebeliğin 4. ayında
Td 2	Td 1'den en az 4 ha
Td 3	Td 2'den en az 6 ay
Td 4	Td 3'den en az 1 yıl gebelikte
Td 5	Td 4'den en az 1 yıl gebelikte



z Aşı Takvimi

	Koruma süresi
	Yok
	1-3 yıl
	5 yıl
	10 yıl
	Doğurganlık çağı boyunca

Hiç aşılanmamış gebelerin aşılamaları sağlanmalıdır. İkinci doz doğumdan en az iki hafta önce tamamlanmalıdır. Yeterli süre sağlanamadıysa tek doz Td almış gebenin ve bebeğinin tetanoz hastalığı açısından risk altında olduğu dikkate alınmalıdır. Temiz doğum şartlarının sağlanması ve bebeğin göbek bakımının doğru yapılması daha da önem kazanmaktadır.

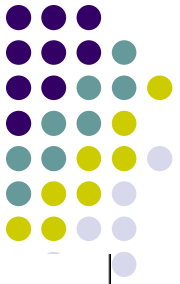
Kayıtlı tetanoz toksoid dozu olanlar: GBP kapsamında 1980 yılı ve sonrasında doğan kişilerin büyük bölümüne erken çocukluk döneminde veya okul çağında tetanoz aşısı uygulaması yapılmış ve bu çocukların bir kısmı doğurganlık çağına ulaşmıştır. 1980'den sonra doğan kadınların aşı kayıtlarının bulunması durumunda, uygun aralıklarla yapılmış en az 3 doz DBT/Td/TT, doğurganlık çağına yapılmış 2 doz TT/Td dozu yerine sayılır ve aşı takvimine kalındığı yerden devam edilir.

ΠΑΡΑΚΑΛΟΥΜΕ
ΝΑ ΔΕΝ ΕΙΣΘΕ ΣΕΜΝΑ
ΕΝΔΕΧΟΜΕΝΟΙ ΝΑ ΒΑΖΕΤΕ
ΠΡΟΣΧΕΤΩΣ ΣΑΣ ΜΙΑ ΠΟΔΙΑ
ΕΥΧΑΡΙΣΤΟΥΜΕ
WELCOME TO THARRI.
SHORTS & BRIEF TOPS
PLEASE USE WRAPS
MEN + WOMEN

THANK YOU



HİÇ KAYIT YOK(AŞISIZ?), PRİMER SERİ VERİLMEK İSTENİYOR



T.C. Sağlık Bakanlığı Çocukluk Dönemi Aşı Takvimi

Aşılar	Doğumda	1. ayın sonu	2. ayın sonu	4. ayın sonu	6. ayın sonu	12. ayın sonu	18. ayın sonu	24. ayın sonu	İlköğretim 1. sınıf	İlköğretim 8. sınıf
Hepatit B	I	II			III					
BCG (Verem)			I							
DaBT - İPA - Hib			I	II	III		R			
KPA			I	II	III	R				
KKK						I			R	
DaBT - İPA									R	
OPA					I		II			
Td										R
Hepatit A							I	II		
Suçiçeği						I				

DaBT-İPA-Hib: Difteri, Aselüler Boğmaca, Tetanoz, İnaktif Polio, Hemofilus Influenza Tip b Aşısı (Beşli Karma Aşı)

KPA: Konjuge Pnömonokok Aşısı

KKK: Kızamık, Kızamıkçık, Kabakulak Aşısı

DaBT-İPA: Difteri, Aselüler Boğmaca, Tetanoz, İnaktif Polio Aşısı (Dörtlü Karma Aşı)

OPA: Oral Polio Aşısı (Çocuk Felci Aşısı)

Td: Erişkin Tipi Difteri-Tetanoz Aşısı

R: Rapel (Pekiştirme)

Aşı takvimindeki tüm aşılar ücretsizdir.

**MMWR2011:60:1-ACIP
Tdap(2005)-ÖNERİ
YENİLEDİ**

SON DOZDAN SONRA

**5 yıl-18 aya kadar
olabilir**



KORUYUCU SÜRE≈10 yıl (5-10 yıl)

2014 Recommended Immunizations for Adults: By Age

If you are this age, talk to your healthcare professional about these vaccines

	Flu Influenza	Td/Tdap Tetanus, diphtheria, pertussis	Shingles Zoster	Pneumococcal		Meningococcal	MMR Measles, mumps, rubella	HPV Human papillomavirus		Chickenpox Varicella	Hepatitis A	Hepatitis B	Hib Haemophilus influenzae type b
				PCV13	PPSV23			for women	for men				
19 - 21 years									3 doses				
22 - 26 years								3 doses	3 doses				
27 - 49 years		1 dose of Tdap*		1 dose	1 or 2 doses	1 or more doses							
50 - 59 years	Flu vaccine every year	Td booster every 10 years					1 or 2 doses			2 doses	2 doses	3 doses	1 or 3 doses
60 - 64 years			1 dose										
65+ year				1 dose	1 dose								

More Information:

There are several flu vaccines available. Talk to your healthcare professional about which flu vaccine is right for you.

* If you are pregnant, you should get a Tdap vaccine during the 3rd trimester of every pregnancy to help protect your babies from pertussis (whooping cough).

You should get zoster vaccine even if you've had shingles before.

There are two different types of pneumococcal vaccine: PCV13 (conjugate) and PPSV23 (polysaccharide). Talk with your healthcare professional to find out if one or both pneumococcal vaccines are recommended for you.

Your healthcare professional will let you know how many doses you need.

If you were born in 1967 or after, and don't have a record of being vaccinated or having had measles, mumps and rubella, talk to your healthcare professional about how many doses you may need.

Recommended for you if you did not get it when you were a child.

There are two HPV vaccines but only one HPV vaccine (Gardasil®) should be given to men.

If you are a male 22 through 26 years old and have sex with men you should complete the HPV vaccine series if you have not already done so.

Your healthcare professional will let you know how many doses you need.

Recommended For You: This vaccine is recommended for you *unless* your healthcare professional tells you that you cannot safely receive it or that you do not need it.

May Be Recommended For You: This vaccine is recommended for you if you have certain risk factors due to your health, job, or lifestyle that are not listed here. Talk to your healthcare professional to see if you need this vaccine.

If you are traveling outside the United States, you may need additional vaccines.

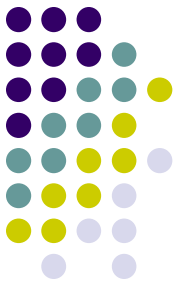
Ask your healthcare professional about which vaccines you may need at least 6 weeks prior to your travel.

For more information, call 1-800-CDC-INFO (1-800-232-4636) or visit www.cdc.gov/vaccines



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

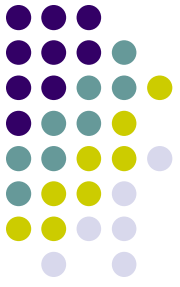
Tdap



- **Adacel (SP); Tdap-11-64 yaş**
- **Boostrix (GSK); ≥ 10 yaş**

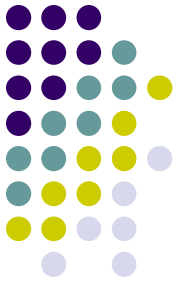
**En Sık Yapılan Aşılama Hatası –
Tdap (Adacel) ile DTAP (Daptacel)**

CEVAP: TETANOZ AŞISI YALNIZCA AYAĞA ÇİVİ BATTIĞINDA YAPILMAZ



11-19 YAŞ: SON DOZ>5 YIL, 1 DOZ RAPEL
SONRA 10 YILDA BİR
1 doz Tdap
KAYIT.....

Aşılamada Sık Yapılan Yanlışlar



- Depolama, Hazırlama
- Uygulama
- Şema
- Kayıt



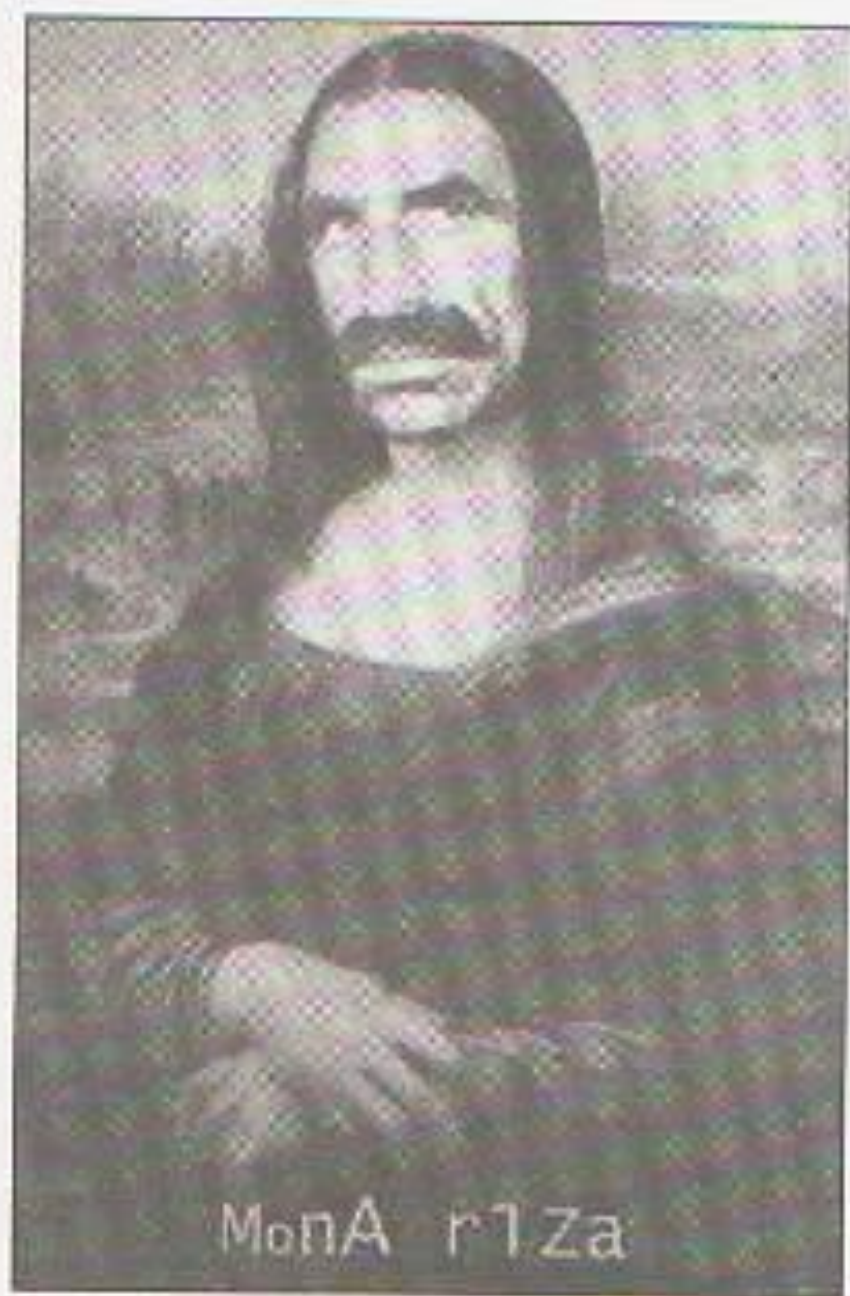
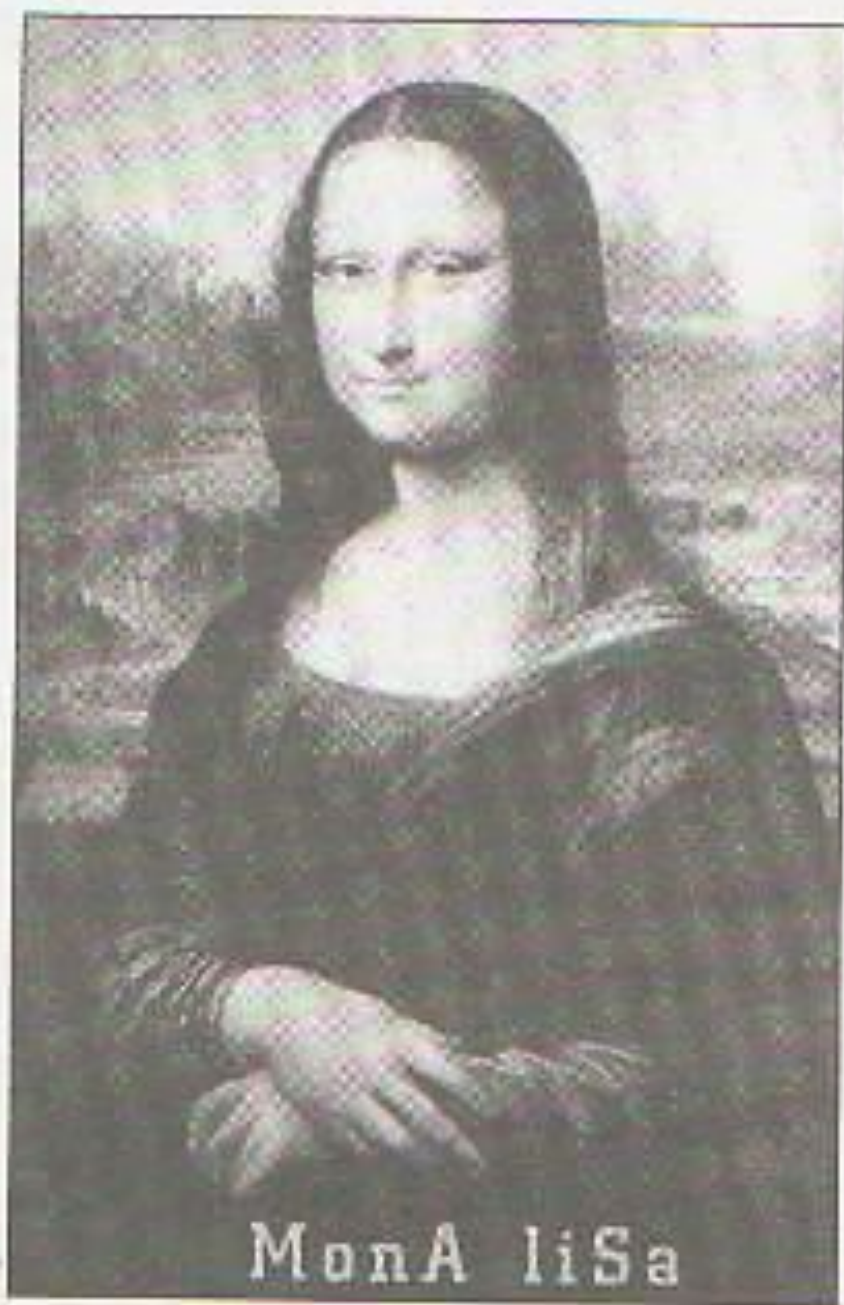
Edward Jenner, 1796



**AŞILARIN
BİLİMSEL BİR
BULUŞ OLARAK
İSTENİLEN ETKİYİ
YAPMASI ANCAK
UYGULANMALARI
İLE MÜMKÜN
OLACAKTIR**



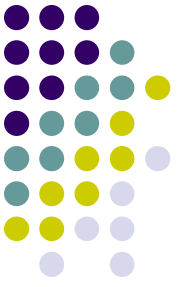
Smallpox





«PRIMUM NİL NOCERE»

ÖNERİLER



- Kolay anlaşılır kılavuzlar
- Dokümentasyon
- Sorunların saptanması
- Yeni planlamalar için işbirliği



