

# **ÇAĞIMIZIN VEBASİ HPV**

**Prof. Dr. Ümit Türsen**



AKADEMİSYEN  
KİTABEVİ

© Copyright 2018

*Bu kitabın, basım, yayın ve satış hakları Akademisyen Kitabevi A.Ş.'ne aittir. Anılan kuruluşun izni alınmadan kitabın tümü ya da bölümleri mekanik, elektronik, fotokopi, manyetik kağıt ve/veya başka yöntemlerle çoğaltılamaz, basılamaz, dağıtılamaz. Tablo, şekil ve grafikler izin alınmadan, ticari amaçlı kullanılamaz. Bu kitap T.C. Kültür Bakanlığı bandrolü ile satılmaktadır.*

**ISBN** **Sayfa ve Kapak Düzenleme**  
978-605-2396-58-2 Rahime DİLMEN

**Kitap Adı** **Baskı ve Cilt**  
Çağımızın Vebası HPV Bizim Dijital Matbaa

**Yazar** **Yayıncı Sertifika No**  
Prof. Dr. Ümit TURSEN 25465

**Yayın Koordinatörü** **DOI**  
Yasin Dilmen 10.37609/akya.2012

**UYARI**

Bu üründe yer alan bilgiler sadece lisanslı tıbbi çalışanlar için kaynak olarak sunulmuştur. Herhangi bir konuda profesyonel tıbbi danışmanlık veya tıbbi tanı amacıyla kullanılmamalıdır. *Akademisyen Kitabevi* ve alıcı arasında herhangi bir şekilde doktor-hasta, terapist-hasta ve/veya başka bir sağlık sunum hizmeti ilişkisi oluşmaz. Bu ürün profesyonel tıbbi kararların eşleniği veya yedeği değildir. *Akademisyen Kitabevi* ve bağlı şirketleri, yazarları, katılımcıları, partnerleri ve sponsorları ürün bilgilerine dayalı olarak yapılan bütün uygulamalardan doğan, insanlarda ve cihazlarda yaralanma ve/veya hasarlardan sorumlu değildir.

İlaçların veya başka kimyasalların reçete edildiği durumlarda, tavsiye edilen dozunu, ilacın uygulanacak süresi, yöntemi ve kontraendikasyonlarını belirlemek için, okuyucuya üretici tarafından her ilaca dair sunulan güncel ürün bilgisini kontrol etmesi tavsiye edilmektedir. Dozun ve hasta için en uygun tedavinin belirlenmesi, tedavi eden hekimin hastaya dair bilgi ve tecrübelerine dayanak oluşturması, hekimin kendi sorumluluğundadır.

*Akademisyen Kitabevi*, üçüncü bir taraf tarafından yapılan ürüne dair değişiklikler, tekrar paketlemeler ve özelleştirmelerden sorumlu değildir.

**GENEL DAĞITIM**

**Akademisyen Kitabevi A.Ş.**

Halk Sokak 5 / A  
Yenişehir / Ankara  
Tel: 0312 431 16 33  
siparis@akademisyen.com

**www.akademisyen.com**

# Önsöz

---

Çağımızda cinsel ilişkiye başlama yaşları, Türkiye dahil birçok ülkede düşmeye başlamış ve bunla birlikte cinsel yolla geçen hastalıklar artmıştır. Bu yolla geçen hastalıklardan en sık gözlenenlerin başında gelen HPV infeksiyonları özellikle bazı kişilerde kronikleşmekte, kanser ve duygusal sorunlar dahil birçok problemlere neden olabilmektedir. Aşılama başta olmak üzere değişik yöntemlerle önüne geçilmeye çalışılan bu hastalık uzun takip süresi gerektirmekte, hem hekime hem de hastaya maddi ve manevi yorucu tablolara neden olabilmektedir. Bu konuda hekimin empati yapması, hastayı rahatlatması çok önemli olup, uzun soluklu takiplerde mutlaka hastayla birlikte karar vererek tedavi seçimi yapmaları şarttır. Genellikle ofis ortamı gibi rahat, fazla kalabalık olmayan ortamlarda takipleri hastaları daha mutlu eden bir yöntemdir. Takip sıklığı az olan hastalarda ev tedavileri, takibe sık gelebilecek hastalarda ise hekimin uyguladığı tedaviler yapılıp, eğer 2 ay içinde hiçbir gerileme olmazsa tedavi seçeneğini değiştirmek veya kombine tedavi uygulamak gerekebilir. Ayrıca eşlerin birbirini suçlamasının önüne geçmek bu gibi hastalıklarda sağlıklı ilişki yürütmek için çok önemlidir.

# İçindekiler

---

GİRİŞ .....	1
1. OLAĞAN SIĞIL (VERRUKA VULGARİS) .....	2
2. AYAK TABANI SIĞILI (PLANTAR VERRÜ) .....	2
3. DÜZ SIĞILLER (VERRUKA PLANA) .....	3
4. SAPLI SIĞILLER (FİLİFORM VERRÜLER) .....	3
5. TIRNAK ETRAFI SIĞILI (PERİUNGUAL VERRÜ) .....	3
6. GENİTAL SIĞILLER .....	3
7. DIŞ GENİTAL (PERİGENİTAL, ANAL VE PERİANAL) KONDİLOMLAR .....	20
ORAL HPV İNFEKSİYONLARI .....	36
İMMUNMODÜLATÖR AJANLAR .....	61
SERVİKAL KANSERLER .....	90
KADINLARDA HPV .....	93
ERKEKLERDE HPV .....	110
ÇOCUKLARDA HPV İNFEKSİYONU .....	133
ANAL KANSERLER .....	139
HPV-İLİŞKİLİ HASTALIKLARIN ÖNLENMESİ .....	140
İMMUN YETMEZLİKLER VE HPV İNFEKSİYONU .....	147
HPV İLİŞKİLİ KANSERLERDE İMMUNOTERAPİ .....	162
KAYNAKLAR .....	190

dası olabileceği saptanmıştır. İmmüsuprese hastaların aşılandıktan sonra siğillerinin kaybolduğu gözlenmiştir. HPV hiperkeratotik benign papillom, skuamöz hücreli kanser ve dermatitli hastalarda deride izole edilebilmektedir. Splenektomi ve HIV pozitif hastalarda da HPV izolasyonu siktir. İmmün yetmezlikli bireylerde temizlenmesi zordur. Aşılamanın rutin yapılması HPV eradikasyonuna yardımcı olabileceği ileri sürülmektedir. Çünkü aşılardan hem tip-spesifik humoral hem de hücrel immun yanıtı arttırılabileceği saptanmıştır.

## KAYNAKLAR

1. Kollipara R, Ekhlasi E, Downing C, Guidry J, Lee M, Tying SK. Advancements in Pharmacotherapy for Noncancerous Manifestations of HPV J Clin Med. 2015; 4(5): 832–846.
2. Kash N, Lee MA, Kollipara R, Downing C, Guidry J, Tying SK. Safety and Efficacy Data on Vaccines and Immunization to Human Papillomavirus. J Clin Med. 2015; 4(4):614-33.
3. Liu YC, Cai ZM, Zhang XJ. Reprogrammed CRISPR-Cas9 targeting the conserved regions of HPV6/11 E7 genes inhibits proliferation and induces apoptosis in E7-transformed keratinocytes. Asian J Androl. 2015 Jul 31. doi: 10.4103/1008-682X.157399.
4. Dominiak-Felden G, Gobbo C, Simondon F. Evaluating the Early Benefit of Quadrivalent HPV Vaccine on Genital Warts in Belgium: A Cohort Study. PLoS One. 2015; 10(7):e0132404.
5. de Lima MM Jr, de Lima MM, Granja F. Treatment of genital lesions with diode laser vaporization. BMC Urol. 2015; 15:39.
6. Riethmuller D, Jacquard AC, Lacau St Guily J, Aubin F, Carcopino X, Pradat P, Dahlab A, Pr  tet JL. Potential impact of a nonavalent HPV vaccine on the occurrence of HPV-related diseases in France. BMC Public Health. 2015; 15:453.
7. Sinha S, Relhan V, Garg VK. Immunomodulators in warts: Unexplored or ineffective? Indian J Dermatol 2015; 60:118-29
8. Wernham AG, Velangi SS. A case of recalcitrant plantar warts associated with statin use. Case Rep Dermatol Med. 2015;2015:320620
9. Hošnjak L, Kocjan BJ, Pirš B, Seme K, Poljak M. Characterization of two novel gammapapillomaviruses, HPV179 and HPV184, isolated from common warts of a renal-transplant recipient. PLoS One. 2015 Mar 6;10(3):e0119154
10. Salavastru CM, Niculescu MC, Zota A, Nicola G, Morariu HS, Solovan C, Patrascu V, Popovici G, Vladuta R, Panduru M, Tiplica GS. Epidemiological aspects of genital warts in Romania - a 2012 retrospective survey. Maedica (Buchar). 2014; 9(2):144-50.
11. Rosales R, Rosales C. Immune therapy for human papillomaviruses-related cancers. World J Clin Oncol. 2014; 5(5):1002-19.

12. Harper DM, Alexander NM, Ahern DA, Comes JC, Smith MS, Heutinck MA, Handley SM. Women have a preference for their male partner to be HPV vaccinated. *PLoS One*. 2014; 9(5):e97119.
13. Chayachinda C, Boriboonhirunsarn D, Thamkhantho M, Nuengton C, Chalermchokcharoenkit A. Number of external anogenital warts is associated with the occurrence of abnormal cervical cytology. *Asian Pac J Cancer Prev*. 2014; 15(3):1177-80.
14. Bharti AH, Chotaliya K, Marfatia Y S. An update on oral human papillomavirus infection. *Indian J Sex Transm Dis* 2013;34:77-82
15. Gianino MM, Delmonte S, Lovato E, Martinese M, Rondoletti S, Bernengo MG, Zotti CM. A retrospective analysis of the costs and management of genital warts in Italy. *BMC Infect Dis*. 2013; 13:470.
16. Howell-Jones R, Soldan K, Wetten S, Mesher D, Williams T, Gill ON, Hughes G. Declining genital Warts in young women in England associated with HPV 16/18 vaccination: an ecological study. *J Infect Dis*. 2013; 208(9):1397-403.
17. Szarewski A, Skinner SR, Garland SM, Romanowski B, et al. Efficacy of the HPV-16/18 AS04-adjuvanted vaccine against low-risk HPV types (PATRICIA randomized trial): an unexpected observation. *J Infect Dis*. 2013; 208(9):1391-6.
18. Wong MC, Lee A, Ngai KL, Chor JC, Chan PK. Knowledge, attitude, practice and barriers on vaccination against human papillomavirus infection: a cross-sectional study among primary care physicians in Hong Kong. *PLoS One*. 2013; 8(8):e71827.
19. Centers for Disease Control and Prevention (CDC). Human papillomavirus vaccination coverage among adolescent girls, 2007-2012, and postlicensure vaccine safety monitoring, 2006-2013 - United States. *MMWR Morb Mortal Wkly Rep*. 2013; 62(29):591-5.
20. Makwe CC, Anorlu RI, Odeyemi KA. Human papillomavirus (HPV) infection and vaccines: knowledge, attitude and perception among female students at the University of Lagos, Lagos, Nigeria. *J Epidemiol Glob Health*. 2012; 2(4):199-206.
21. Colón-López V, Del Toro-Mejías LM, Ortiz AP, Tortolero-Luna G, Palefsky JM. HPV awareness and willingness to HPV vaccination among high-risk men attending an STI clinic in Puerto Rico. *P R Health Sci J*. 2012; 31(4):227-31.
22. Uusküla A, Mürsepp A, Kawai K, Raag M, Jürisson M, Pillsbury M. The epidemiological and economic impact of a quadrivalent human papillomavirus (hpv) vaccine in Estonia. *BMC Infect Dis*. 2013; 13:304.
23. Blomberg M, Dehlendorff C, Munk C, Kjaer SK. Strongly decreased risk of genital warts after vaccination against human papillomavirus: nationwide follow-up of vaccinated and unvaccinated girls in Denmark. *Clin Infect Dis*. 2013; 57(7):929-34.
24. Al-Mutairi N, AlKhalaf M. Mucocutaneous warts in children: clinical presentations, risk factors, and response to treatment. *Acta Dermatovenerol Alp Pannonica Adriat*. 2012; 21(4):69-72.

25. Bresse X, Adam M, Llargeron N, Roze S, Marty R. A comparative analysis of the epidemiological impact and disease cost-savings of HPV vaccines in France. *Hum Vaccin Immunother.* 2013; 9(4):823-33.
26. Bruggink SC, Gusssekloo J, de Koning MN, Feltkamp MC, Bavinck JN, Quint WG, As-sendelft WJ, Eekhof JA. HPV type in plantar warts influences natural course and treatment response: secondary analysis of a randomised controlled trial. *J Clin Virol.* 2013; 57(3):227-32.
27. Nureña CR, Brown B, Galea JT, Sánchez H, Blas MM. HPV and genital warts among Peruvian men who have sex with men and transgender people: knowledge, attitudes and treatment experiences. *PLoS One.* 2013; 8(3):e58684.
28. Ali H, Guy RJ, Wand H, Read TR, Regan DG, Grulich AE, Fairley CK, Donovan B. Decline in in-patient treatments of genital warts among young Australians following the national HPV vaccination program. *BMC Infect Dis.* 2013; 13:140.
29. Lenzi A, Mirone V, Gentile V, Bartoletti R, Ficarra V, Foresta C, Mariani L, Mazzoli S, Parisi SG, Perino A, Picardo M, Zotti CM. Rome Consensus Conference - statement; human papilloma virus diseases in males. *BMC Public Health.* 2013; 13:117.
30. Patel H, Wagner M, Singhal P, Kothari S. Systematic review of the incidence and prevalence of genital warts. *BMC Infect Dis.* 2013; 13:39.
31. Yoshikawa H, Ebihara K, Tanaka Y, Noda K. Efficacy of quadrivalent human papillomavirus (types 6, 11, 16 and 18) vaccine (GARDASIL) in Japanese women aged 18-26 years. *Cancer Sci.* 2013; 104(4):465-72.
32. Marty R, Roze S, Bresse X, Llargeron N, Smith-Palmer J. Estimating the clinical benefits of vaccinating boys and girls against HPV-related diseases in Europe. *BMC Cancer.* 2013; 13:10.
33. Laz TH, Rahman M, Berenson AB. Human papillomavirus vaccine uptake among 9-17 year old males in the United States: the National Health Interview Survey, 2010. *Hum Vaccin Immunother.* 2013; 9(4):874-8.
34. Miljkovic J. A novel therapeutic approach to plane warts: a report on two cases. *Acta Dermatovenerol Alp Pannonica Adriat.* 2012; 21(3):63-4.
35. Marlow LA, Zimet GD, McCaffery KJ, Ostini R, Waller J. Knowledge of human papillomavirus (HPV) and HPV vaccination: an international comparison. *Vaccine.* 2013; 31(5):763-9.
36. Alexander AB, Stupiansky NW, Ott MA, Herbenick D, Reece M, Zimet GD. Parent-son decision-making about human papillomavirus vaccination: a qualitative analysis. *BMC Pediatr.* 2012; 12:192.
37. Stern PL, van der Burg SH, Hampson IN, Broker TR, Fiander A, Lacey CJ, Kitchener HC, Einstein MH. Therapy of human papillomavirus-related disease. *Vaccine.* 2012; 30 Suppl 5:F71-82.
38. Domínguez Gómez J, Simón RD, Abreu Daniel A, Zelenkova H. Effectiveness of glycyrrhizinic Acid (glizigen) and an immunostimulant (viusid) to treat anogenital warts. *ISRN Dermatol.* 2012; 2012: 863692.

39. Yang YG, Zou XB, Zhao H, Zhang YJ, Li HJ. Photodynamic therapy of condyloma acuminata in pregnant women. *Chin Med J (Engl)*. 2012; 125(16):2925-8.
40. Nasser N. Treatment of common warts with the immune stimulant *Propionium bacterium parvum*. *An Bras Dermatol*. 2012; 87(4):585-9.
41. Leval A, Herweijer E, Arnheim-Dahlström L, Walum H, Frans E, Sparén P, Simard JF. Incidence of genital warts in Sweden before and after quadrivalent human papillomavirus vaccine availability. *J Infect Dis*. 2012; 206(6):860-6.
42. Arbyn M, de Sanjosé S, Saraiya M, Sideri M, Palefsky J, Lacey C, Gillison M, Bruni L, Ronco G, Wentzensen N, Brotherton J, Qiao YL, Denny L, Bornstein J, Abramowitz L, Giuliano A, Tommasino M, Monsonog J. EUROGIN 2011 roadmap on prevention and treatment of HPV-related disease. *Int J Cancer*. 2012; 131(9):1969-82.
43. Stanley MA. Epithelial cell responses to infection with human papillomavirus. *Clin Microbiol Rev*. 2012; 25(2):215-22.
44. Tyring SK. Effect of Sinecatechins on HPV-Activated Cell Growth and Induction of Apoptosis. *J Clin Aesthet Dermatol*. 2012; 5(2):34-41.
45. Ozgul N, Tuncer M, Abacioglu M, Gultekin M. Estimating prevalence of genital warts in Turkey: survey among KETEM-affiliated gynecologists across Turkey. *Asian Pac J Cancer Prev*. 2011; 12(9):2397-400.
46. Gaston A, Garry RF. Topical vitamin A treatment of recalcitrant common warts. *Virology*. 2012; 9:21.
47. Bussen S, Sütterlin M, Schmidt U, Bussen D. Anogenital Warts in Childhood - Always a Marker for Sexual Abuse? *Geburtshilfe Frauenheilkd*. 2012; 72(1):43-48.
48. Sekhar Namburi UR, Omprakash, Babu G. A review on management of warts in Ayurveda. *Ayu*. 2011; 32(1):100-2
49. Gupta R. Plantar warts treated with topical adapalene. *Indian J Dermatol*. 2011; 56(5):513-4.
50. Mendoza N, Hernandez PO, Tyring SK. HPV vaccine update: new indications and controversies. *Skin Therapy Lett*. 2011; 16(8):1-3.
51. Ursini T, Polilli E, Congedo G, Tontodonati M, Di Masi F, Mazzotta E, Parruti G, Pipa L. Complete Healing of a Giant Wart in a Severely Immune-Compromised Patient with HIV Infection Treated with Acupuncture. *Case Rep Dermatol*. 2011; 3(2):175-80.
52. Larke N, Thomas SL, Dos Santos Silva I, Weiss HA. Male circumcision and human papillomavirus infection in men: a systematic review and meta-analysis. *J Infect Dis*. 2011; 204(9):1375-90.
53. Butler LM, Wu AH. Green and black tea in relation to gynecologic cancers. *Mol Nutr Food Res*. 2011; 55(6):931-40.
54. Brandt HR, Fernandes JD, Patriota RC, Criado PR, Belda Junior W. Treatment of human papillomavirus in childhood with imiquimod 5% cream. *An Bras Dermatol*. 2010; 85(4):549-53.



55. Nucci V, Torchia D, Cappugi P. Treatment of anogenital condylomata acuminata with topical photodynamic therapy: report of 14 cases and review. *Int J Infect Dis.* 2010; 14 Suppl 3:e280-2.
56. Mortensen GL, Larsen HK. The quality of life of patients with genital warts: a qualitative study. *BMC Public Health.* 2010; 10:113.
57. Yang J, Pu YG, Zeng ZM, Yu ZJ, Huang N, Deng QW. Interferon for the treatment of genital warts: a systematic review. *BMC Infect Dis.* 2009; 9:156.
58. Rapose A. Human papillomavirus and genital cancer. *Indian J Dermatol Venereol Leprol.* 2009; 75(3): 236-43
59. Stefani M, Bottino G, Fontenelle E, Azulay DR. Efficacy comparison between cimetidine and zinc sulphate in the treatment of multiple and recalcitrant warts. *An Bras Dermatol.* 2009; 84(1):23-9.
60. Rapose A. Human papillomavirus and genital cancer. *Indian J Dermatol Venereol Leprol* 2009;75:236-44
61. Chao C, Slezak JM, Coleman KJ, Jacobsen SJ. Papanicolaou screening behavior in mothers and human papillomavirus vaccine uptake in adolescent girls. *Am J Public Health.* 2009; 99(6):1137-42.
62. Ferizi M, Gercari A, Pajaziti L, Blyta Y, Kocinaj A, Dobruna S. Condyloma acuminata in child end laser therapy: a case report. *Cases J.* 2009; 2(1):123.
63. Loo SK, Tang WY. Warts (non-genital). *BMJ Clin Evid.* 2009; 2009. pii: 1710.
64. Dianzani C, Pierangeli A, Avola A, Borzomati D, Persichetti P, Degener AM. Intra-anal condyloma: Surgical or topical treatment? *Dermatology Online Journal* 14 (12): 8
65. Sawaya GF, Smith-McCune K. HPV vaccination--more answers, more questions. *N Engl J Med.* 2007; 356(19):1991-3.
66. Roden R, Wu TC. How will HPV vaccines affect cervical cancer? *Nat Rev Cancer.* 2006; 6(10):753-63.
67. Gonik B. Strategies for fostering HPV vaccine acceptance. *Infect Dis Obstet Gynecol.* 2006; 2006 Suppl: 36797.
68. Jayasinghe Y, Garland SM. Genital warts in children: what do they mean? *Arch Dis Child.* 2006; 91(8): 696-700.
69. Scheinfeld N, Lehman DS. An evidence-based review of medical and surgical treatments of genital warts. *Dermatol Online J.* 2006; 12(3):5.
70. Scheinfeld N, Lehman DS. An evidence-based review of medical and surgical treatments of genital warts. *Dermatology Online Journal* 12 (3): 5
71. Bodaghi S, Wood LV, Roby G, Ryder C, Steinberg SM, Zheng ZM. Could human papillomaviruses be spread through blood? *J Clin Microbiol.* 2005; 43(11):5428-34.
72. Geipert N. Vaccinating men for HPV: new strategy for preventing cervical cancer in women? *J Natl Cancer Inst.* 2005; 97(9):630-1.

73. Georgala S, Katoulis AC, Georgala C, Bozi E, Mortakis A. Oral isotretinoin in the treatment of recalcitrant condylomata acuminata of the cervix: a randomised placebo controlled trial. *Sex Transm Infect.* 2004; 80(3):216-8
74. Fuchs SM, Fluhr JW, Bankova L, Tittelbach J, Hoffmann G, Elsner P. Photodynamic therapy (PDT) and waterfiltered infrared A (wIRA) in patients with recalcitrant common hand and foot warts. *Ger Med Sci.* 2004; 2:Doc08.
75. Wiley DJ, Douglas J, Beutner K, Cox T, Fife K, Moscicki AB, Fukumoto L. External genital warts: diagnosis, treatment, and prevention. *Clin Infect Dis.* 2002; 35 (Suppl 2):S210-24.
76. Syrjänen S, Puranen M. Human papillomavirus infections in children: the potential role of maternal transmission. *Crit Rev Oral Biol Med.* 2000;11(2):259-74.
77. Gall SA. Female genital warts: global trends and treatments. *Infect Dis Obstet Gynecol.* 2001;9(3):149-54.
78. Snoeck R, Bossens M, Parent D, Delaere B, Degreef H, Van Ranst M, Noël JC, Wulfsohn MS, Rooney JF, Jaffe HS, De Clercq E. Phase II double-blind, placebo-controlled study of the safety and efficacy of cidofovir topical gel for the treatment of patients with human papillomavirus infection. *Clin Infect Dis.* 2001;33(5):597-602.
79. Tyring SK, Arany I, Stanley MA, Tomai MA, Miller RL, Smith MH, McDermott DJ, Slade HB. A randomized, controlled, molecular study of condylomata acuminata clearance during treatment with imiquimod. *J Infect Dis.* 1998;178(2):551-5.
80. Anal Warts (*Condylomata Acuminata*)– Current Issues and Treatment Modalities. Leszczyszyn J, Łebski I, Łysenko L, Hirnle L, Gerber H. *Adv Clin Exp Med* 2014; **23**: 307–311.
81. Luna J, Plata M, Gonzalez M, Correa A, Maldonado I, et al. Long-Term Follow-up Observation of the Safety, Immunogenicity, and Effectiveness of Gardasil™ in Adult Women. *PLoS ONE* 2013; 8(12): e83431.
82. Fua LY, Bonhomme LA, Cooper SC, Joseph J G, Zimet GD. Educational interventions to increase HPV vaccination acceptance: A systematic review. *Vaccine.* 2014; 32(17): 1901–1920.
83. Sawaya GF, Smith-McCune K. HPV Vaccination — More Answers, More Questions. *N Engl J Med* 2007; 356:1991-2.
84. Intlekofer KA, Cunningham MJ, Caplan AL. The HPV Vaccine Controversy. *American Medical Association Journal of Ethics* 2012; 14: 39-49. Östensson E, Fröberg M, Leval A,
85. Hellström A-C, Bäcklund M, Zethraeus N, et al. Cost of Preventing, Managing, and Treating Human Papillomavirus (HPV)-Related Diseases in Sweden before the Introduction of Quadrivalent HPV Vaccination. *PLoS ONE* 2015; 10(9): e0139062.
86. Rosales R, Rosales C. Immune therapy for human papillomaviruses-related cancers. *World J Clin Oncol* 2014; 5(5): 1002-1019.

87. Burger EA, Sy S, Nygard M, Kristiansen IS, Kim JJ Prevention of HPV-Related Cancers in Norway: Cost-Effectiveness of Expanding the HPV. Vaccination Program to Include Pre-Adolescent Boys. *PLoS ONE* 2014; 9(3): e89974.
88. Namburi URS, Omprakash, Babu G. A review on management of warts in *Ayurveda*. *AYU* 2011; 32: 100-2.
89. Lee JH, Burm JS, Yang WY, Kang SY, Byun SW. Treatment of Verruca Vulgaris in Both External Auditory Canals Using Bleomycin Injections. *Clin Exp Otorhinolaryngol* 2015; 8: 295-297.
90. Chayachinda C, Boriboonhirunsarn D, Thamkhantho M, Nuengton C, Chalermchokcharoenkit A. Number of External Anogenital Warts is Associated with the Occurrence of Abnormal Cervical Cytology. *As Pac J Cancer Prevent* 2014; 15:1177-80.
91. Jayasinghe Y, Garland SM. Genital warts in children: what do they mean? *Arch Dis Child*. 2006; 91(8):696-700.
92. Scheinfeld N. Update on the treatment of genital warts. *Dermatology Online Journal* 2013; 19(6):1-10
93. Gall SA. Female genital warts: global trends and treatments. *Infect Dis Obstet Gynecol* 2001;9:149-154
94. Ogunmodede F, Yale SH, Krawisz B, Tyler GC, Evans AC. Human Papillomavirus Infections in Primary Care. *Clinical Medicine & Research* 2007; 5 (4): 210-217
95. Koshiola J, Finney-Rutten L, Moserc RP, Hessed N. Knowledge of Human Papillomavirus: Differences by Self-reported Treatment for Genital Warts and Sociodemographic Characteristics. *Health Commun*. 2009; 14(4): 331-345
96. Joel M. Palefsky. HPV infection in men. *Disease Markers*. 2007; 23: 261-272.
97. Bresse X, Adam M, LARGERON N, Roze S, Marty R. A comparative analysis of the epidemiological impact and disease cost-savings of HPV vaccines in France. *Hum Vacc Immunotherap* 2013; 9: 823-833.
98. Mosa C, Trizzino A, Trizzino A, Di Marco F, D'Angelo P, Farruggia P. Treatment of human papillomavirus infection with interferon alpha and ribavirin in a patient with acquired aplastic anemia. *Int J Inf Dis* 2014; 23: 25-27.
99. Dinleyici M, Saracoglu N, Eren M, Kiliç Ö, Ciftci E, Sag Ç, Kara A, Dinleyici EC. Giant condyloma acuminata due to human papillomavirus type 16 in an infant successfully treated with topical imiquimod therapy. *Dermatol Rep* 2015; 7:6134.
100. Leiding JW, Holland SM. Warts and all: Human papillomavirus in primary immunodeficiencies. *J Allergy Clin Immunol* 2012;130:1030-48.
101. Ghaemmaghami F, Nazari Z, Mehrdad N. Female Genital Warts. *Asian Pacific J Cancer Prev* 2007; 8: 339-347
102. Camargo CLA, Belda Junior W, Fagundes LJ, Romiti R. A prospective, open, comparative study of 5% potassium hydroxide solution versus cryotherapy in the treatment of genital warts in men. *An Bras Dermatol*. 2014;89(2):236-40.
103. Gaston A, Garry RF. Topical vitamin A treatment of recalcitrant common warts. *Virol J* 2012: 9:21